JULY 13, 1940

Railway Age

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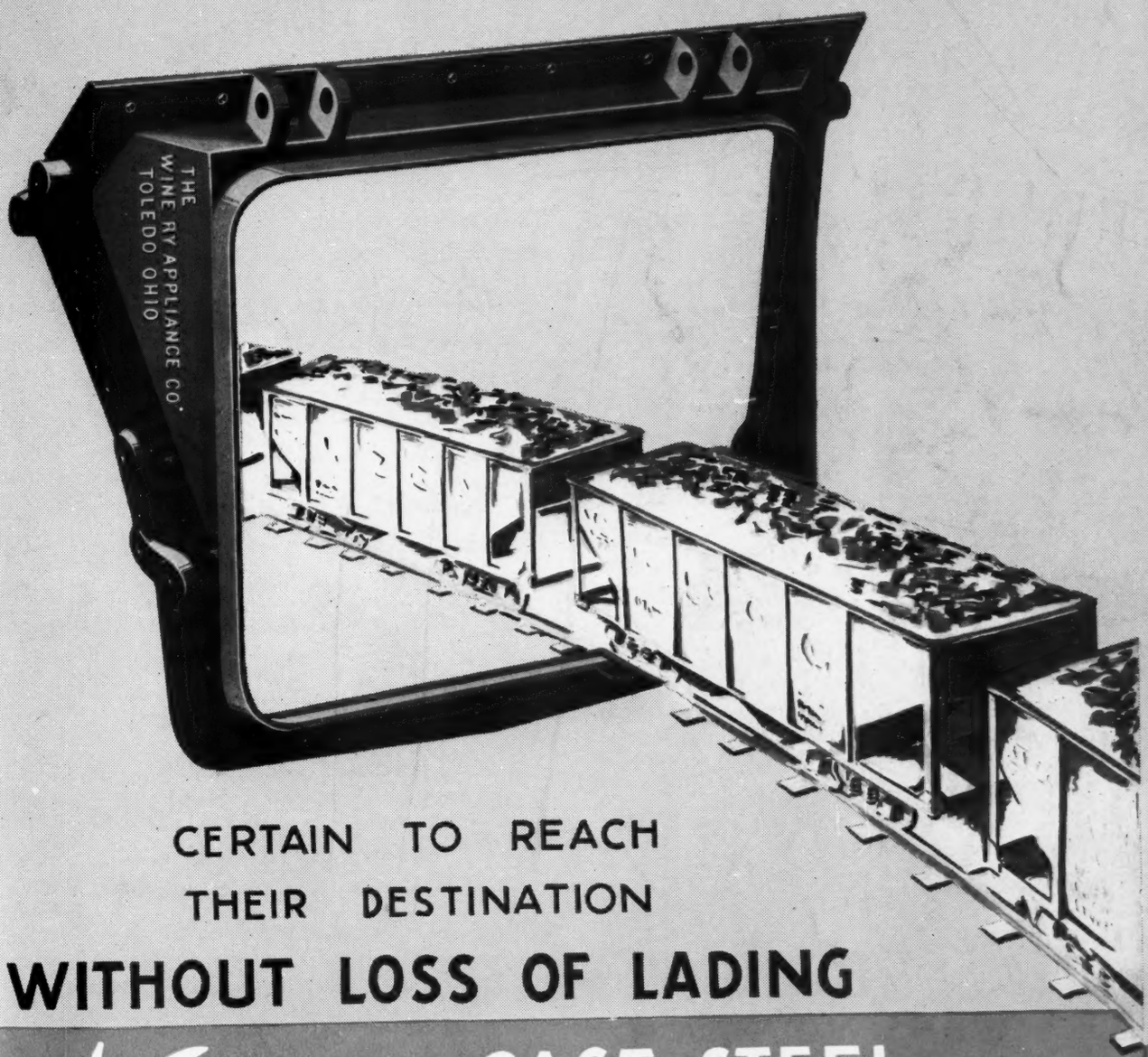

CERTAIN TO REACH
THEIR DESTINATION
WITHOUT LOSS OF LADING

Wine CAST STEEL
HOPPER FRAMES

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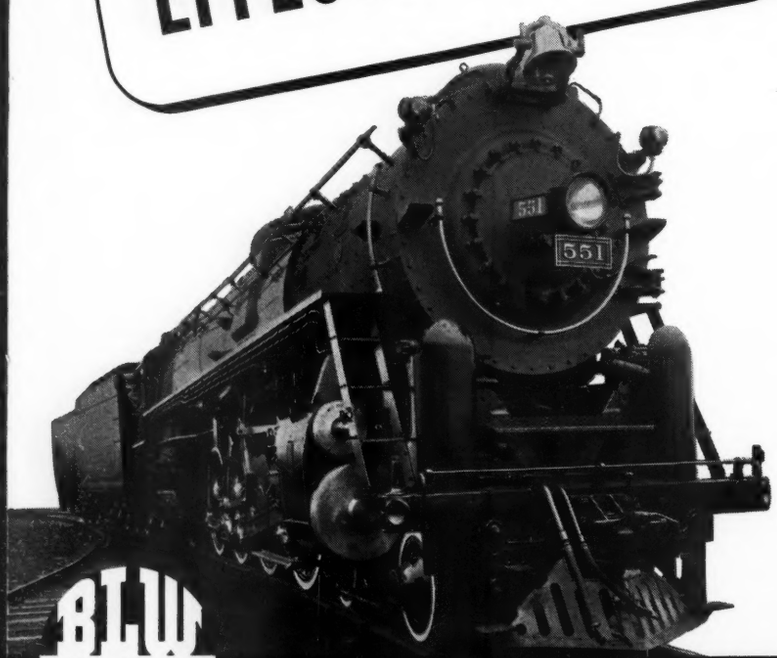
The WINE RAILWAY APPLIANCE CO., TOLEDO, OHIO

A PROFITABLE INVESTMENT

REDUCTION IN *Double-Heading* EFFECTS SAVINGS



In 1937, Baldwin delivered five 4-8-4 type locomotives—named for famous generals—to the Richmond, Fredericksburg & Potomac Railroad, for freight service between Richmond and Potomac Yard, a distance of 110 miles.

The record of freight car miles and double-headed trains for corresponding periods before and after the installation of these five modern locomotives, will illustrate the immediate savings effected.

	February to May, inclusive	
	1936	1938
Freight car miles	11,615,924	14,729,910
Double-headed trains	657	199

With an increase of more than 26% in freight car miles, the number of double-headed trains was reduced approximately 70%!

Translated into savings, this reduction in double-heading and increase in car mileage, makes these locomotives an exceedingly profitable investment.

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THE BALDWIN LOCOMOTIVE WORKS

Philadelphia

"Security" versus Progress — or Both Progress and Security?

There has occurred within the last decade a most significant change in the slogan of the American people. For almost a century and a half that slogan was "Progress"; and virtually all policies of government and business were intended to promote progress. Within recent years it has become "Security"; and most policies of government and business have been intended to promote security, regardless of their effect on progress. Government has sought to promote security for workingmen by compelling collective bargaining, putting a floor under wages and providing doles and unemployment and old-age pensions; for farmers, by regulating prices and production with subsidies; for investors, by regulating the issuance of bonds and stocks. Business has sought security by avoiding risky investments and buying government bonds or letting capital lie idle in the banks.

This substitution of "security" for "progress" as a goal was started by the 1929 panic; but, as after other panics, the substitution, in the normal course of events, would have been temporary. It has been continued principally because of the leadership and policies of an administration at Washington committed to the view that the means by which progress formerly was attained were inimical to the masses. Therefore it has followed policies which, their advocates have contended, would provide the masses with more security without hindering progress, or, if they did hinder progress, would be better for the masses, anyway.

Have "Security" Policies Hindered Progress?

Have these policies hindered progress? If so, have they, nevertheless, benefited the masses by increasing their security? Both the advocates and opponents of these policies should be required to face these questions, and fully discuss both the policies and their results during the national political campaign that will get well under way after the Democratic convention next week. Attention has been diverted from them recently by discussion and activity regarding another essential form of security—i. e., from foreign attack. But we are still confronted with the questions (1) whether policies being followed to promote economic security are hindering or preventing economic progress, and (2) whether, if so, they do or can promote economic security for the masses. And these questions are being made of more, not less, vital importance by the program of national defense.

Nobody, as far as we know, has yet undertaken to show that policies which hinder or prevent economic progress can fail to hinder or prevent the provision of economic security, or military security, or both. The only possible means of providing either kind of security is adequate production of needed things; and, as our population is still growing, this must mean that we must have the increase of production that can be accomplished only by economic progress.

"Security"—with 9 Billion Less National Income!

How, then, have the policies to promote security that have been followed during the last seven years actually worked? The widely different policies to promote progress that were followed before the depression always did, excepting during short intervals, promote progress, although undoubtedly providing too little security. They did not prevent business collapses and depressions, including the collapse of 1929 and the three years of depression and unemployment before present "security" policies were adopted. Let us, however, compare statistics for the seven years 1926-1932, inclusive, and the seven years 1933-1939, inclusive, in the accompanying table, which indicate economic conditions and results in this country during the former period under the policy of progress and during the latter period under the policy of security.

The figures show that under the policy of "security" the national income of the American people has averaged 9 billion dollars a year, or $104 per capita, less during the last seven years than during the preceding seven years, although the preceding seven years included three years of the depression. How has this curtailment of national income affected the masses? Total farm income, in spite of federal government "benefit" payments, has averaged 1 billion 300 million a year less. Total wages of factory workers have averaged 1 billion 88 million dollars a year less. Total

wages and salaries of all workers have averaged 9 billion 400 million less. The number of unemployed has averaged 6,000,000 more.

"Security" on the Railways—with 500,000 Less Employees

Most railway employees believe they have benefited by the policies of an administration devoted to security rather than progress. They are now receiving higher wages than ever before; and the railways are being taxed to provide them with retirement pensions. But that is by no means the entire railroad story even from the standpoint of present employees; and from the standpoint of those who would like to be employed, but are not, the story is quite different. The gross earnings of the railways during the last seven years have averaged 1 billion 800 million dollars annually less than in the seven years before. Consequently, the railways have employed an average of 504,000 less persons and paid an average of 818 million dollars annually less wages.

National "Progress" and "Security"
Seven years 1926-1932 compared with seven years 1933-1939

General	Average of Seven Years 1926-1932, Inc.	Average of Seven Years 1933-1939, Inc.	Per cent Change
National income	$69,062,000,000	$59,783,000,000	−13
Average income per capita	$570	$466	−18
Number unemployed workers	4,820,000	10,617,000	+120
Cost of Federal Government	$3,944,000,000	$7,570,000,000	+92
Number employed in executive departments	558,300	771,830	+38
Change in public debt in 7 years	−$1,029,000,000	+$20,985,000,000	...
Change in per capita public debt	−$21.98	+$153.41	...
Total wages and salaries	$46,700,000,000	$37,300,000,000	−20
Farm cash income from sales	$9,043,000,000	$7,255,000,000	−20
Farm benefit payments from Federal Government	0	$442,000,000	...
Total farm income	$9,043,000,000	$7,697,000,000	−15
Cost of running Dept. of Agriculture	$161,738,000	$831,455,000	+414
Annual pay roll of factory workers	$8,801,104,000	$7,713,368,000	−12
Amount of new capital issues	$3,520,000,000	$629,000,000	−82
Private construction	$6,410,000,000	$2,322,000,000	−64
Govt. construction, Federal, State, local	$2,357,000,000	$1,890,000,000	−20
Railroads			
Cars of revenue freight loaded	45,766,000	32,844,000	−28
Gross earnings	$5,501,257,000	$3,656,895,000	−34
Operating expenses	$3,949,217,000	$2,567,814,000	−35
Taxes	$354,052,229	$295,451,282	−17
Net Ry. Operating Income	$918,006,000	$522,285,000	−43
Rate of return on property investment	3.60%	2.01%	−44
Number of employees	1,515,700	1,011,524	−33
Total compensation of employees	$2,534,007,581	$1,715,828,150	−32
Average taxes per employee	$236	$292	+24
Average compensation per employee	$1,661	$1,695	+2

Average annual compensation per employee increased from $1,661 in the seven years 1926-1932 to $1,695 in the last seven years, or $34; but because of the government's "spending for security" railway taxes per employee increased $56 annually. Furthermore, by no means all advances in railway wages were postponed until adoption of the policy of security. On the contrary, under the policy of progress the average annual increase in wages per railway employee from 1919 to 1929 was $258, or 17 per cent, while from 1929 to 1939, including seven years under the policy of security, it was only $142, or 8 per cent. And the average wage of 1929 was paid to 1,661,000 employees, while that of 1939 was paid to only 988,000.

In view of these facts, who can give any good reason for *not* believing that the railways would have employed hundreds of thousands more men and paid them billions of dollars more in wages during the last seven years if former American policies intended to promote progress had not been replaced by policies intended, instead, to promote security regardless of their effects on progress?

Amount of Total Income Determines Security

The history of the country for the 140 years ending with 1930 shows that, excepting for brief intervals, the policy of promoting progress increased national production and income; and the history of the last seven years' effort to promote "security" regardless of the effect on progress shows that, by hindering or preventing progress, it has curtailed incomes and increased insecurity for most of the people. The *amount* of the income of a nation or an industry is far more important in determining how much security is enjoyed by its people or employees than the way that that income is divided. Obviously, the railroads provided security for more people in the seven years when they had average annual gross earnings of 5½ billion dollars, and paid an average of 1,516,000 persons an average of more than 2 billion 500 million dollars annually in wages, than during the last seven years when they had average annual gross earnings of only 3⅔ billion dollars and paid an average of less than a million persons an average of only 1 billion 700 million dollars annually in wages.

The more than 100 million dollars annually in payroll taxes they are being required to pay toward "security" is a small offset to the average of 800 million dollars a year in wages their employees have lost during the last seven years because the nation has substituted a policy of economic security for its former policy of economic progress.

No Real Security Without Progress

There is little difference between the policies in foreign affairs and of military preparedness advocated by the New Deal administration and the Republican candidate for president. Consequently, **the paramount issue with which the American people are confronted in the 1940 national political campaign is whether they will support policies which, by aiming at security, are preventing both progress and security, or policies intended and calculated to revive progress and thereby make possible both larger incomes and more security.** "The problem, then, is not to choose between preserving or repealing the recent social reforms," said Prime Minister Daladier and Finance Minister Reynaud of France in their "general report" to President LeBrun in November, 1938, [see *Railway Age*, June 29, page 1147]. "The problem is to prevent them from automatically dwindling to nothing * * * to prevent employers and employed, in a country which is still poor, from having nothing

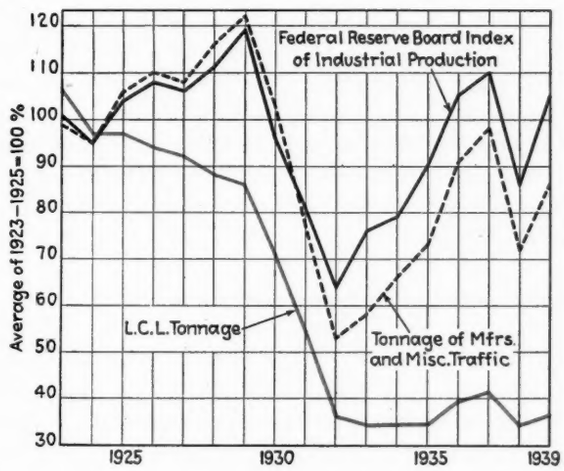
to share but poverty. * * * It is impossible at one and the same time to continue the armament policy imposed upon us by the international situation and also a policy of great public works. *No country can engage in such a gamble without deliberately sacrificing the welfare of the working masses.*"

That is as true of the United States now as it was of France when it was written. For this country to try to continue policies under which during the last seven years the national income has averaged 9 billion dollars annually less, and spending by the federal government has averaged 3 billion 600 million annually more, than during the preceding seven years, and at the same time try to carry out "the armament policy

Trying to Delay the Inevitable

No serious and objective student of railway rates maintains that the traditional class-rate structure should in the public interest be maintained in competitive situations—or even, in the long run, that it *can* be maintained. Nevertheless, there are many individuals and groups to whom a bird in hand is more attractive than two in the bush and who believe that the *status quo,* despite its fundamental instability, gives them certain advantages. Hence they seek to stall off the inevitable as long as they can. (If that is putting it too strongly, we shall be glad to entertain objections.)

Certain shipper interests—recipients, generally speaking, of the lowest class rates in the country —are petitioning the Commission to abandon its investigation of railroad and motor classifications and railroad class rates (Dockets 28,300, 28,310 and MC 150), urging it would be *unpatriotic* to



continue them now! These same parties, again speaking generally, were urging the regulators to lay-off before rearmament was even thought of. Many of these same shippers also oppose adequate waterway regulation and the elimination of transportation subsidies. Have they analyzed the situation beyond their immediate individual interests?

Do they realize that transportation facilities have trebled since 1920; that 25 per cent of rail and 50 per cent of truck equipment is being used to transport less than 5 per cent of the total traffic; that the loading efficiency of l.c.l. cars has been impaired 50 per cent since 1920; that the attempts to perpetuate the class-rate structure in the light of modern competitive conditions is largely responsible for this uneconomic expansion and its continuing growth; and that all these developments mean thinner traffic, lower earnings and, ultimately, higher freight rates for all?

In last week's *Railway Age,* page 4, it was again demonstrated how the "pick-and-choose" opportunities of the present rate structure enable forwarders and trucks to operate beyond their true economic radius, and that 1938 increases in railroad rates added greatly to these opportunities. The chart herewith further demonstrates how the growth of forwarding and trucking has been largely at railroad expense.

The Federal Reserve index was 99 in 1923, 105 in 1939 and increased a few points further by June 1, 1940.

The railroad l. c. l. index was 106 in 1923, only 36 in 1939, and lost 2½ points additional by June 1 this year. The manufactures and miscellaneous c. l. index was 101 in 1923, 86 in 1939, and gained only 8 points by June 1, 1940.

Comparable truck data are not available before 1936, but the A. T. A. truck traffic index increased 21.24 points to January 1, 1940, from a 1936 base, and 39.99 points by June 1, 1940.

Rail l. c. l. shrunk 10.2 points between 1936 and June 1, 1940, and manufactures and miscellaneous c. l. increased only 2.5 points in this period.

The trend away from the railroads is continuing unabated. Rail l. c. l. lost 2 per cent in May, but trucks gained 12 per cent.

It is significant too that the railroads' loss of manufactures and miscellaneous traffic parallels their l.c.l. losses since 1923. The percentage loss is less but the loss in tons is doubtless as much or more. When it is considered that l.c.l. is generally handled as an outbound movement and c.l. traffic as a "back haul," it is obvious that the rate structure must be revised if this unsound competitive situation is to be effectively dealt with. Moreover, soundly-conceived action in this direction would produce better utilization of equipment and release a considerable part of it for more effective service.

Voluntary, rather than governmental, action is preferable whenever possible. But not only the carriers and a few shippers have an interest at stake in the present situation—the general public interest is involved too. With the principals hopelessly deadlocked, as appears to be the case, is it not inevitable and legitimate that the regulatory authorities should endeavor to break the log-jam?

The recent example of the Southern lines, which contemplates re-adjustment of ratings on several thousand classification items, is something that all the railroads might ponder. Such action, if sufficiently extensive, would remove the incentive for I. C. C. and Congressional investigations into the class-rate structure. Which is the more realistic attitude — that of the Southern roads, or that of taking no action at all, and hoping that the regulatory authorities won't act either?

imposed upon us by the international situation," would be to make a gamble which all human experience indicates would lead straight to disaster. And the masses who are supposed to be, but as yet plainly have not been, benefited by these policies of "security" without progress would be, as for seven years they have been, the greatest sufferers from them.

Can Management and Labor Get Together?

The sixth birthday of the National Railroad Adjustment Board was observed by the railways by having John Dickinson, general solicitor of the Pennsylvania, deliver a scathing denunciation of that body before the Attorney General's Committee of Administrative Procedure. It would seem that some concerted effort at last is being begun by the railways to rid themselves of an incubus that year after year has been becoming more indefensibly burdensome and costly to them. An airing of the activities of this board in public places and the public prints, and concerted action by the railways to secure either its reform or abolition, have been much too long delayed—especially the needed concerted action by the railways. It has become a malodorous growth inimical to the interests of management and men alike and to any possible sound cooperation by them for their mutual benefit.

Misinformation Regarding Railway Labor Act

An astonishing amount of misinformation exists with regard to the operation of the Railway Labor Act, and especially of this board, which the act created. This is illustrated by the remarks made by Governor Stassen of Minnesota in his keynote speech at the Republican national convention, when he contrasted the peace, sweetness and light supposed to prevail in the relations between management and labor under the Railway Labor Act with what is occurring in other industries under the National Labor Relations Act. To those who know the facts his remarks sounded keenly ironic since, in reality, there is perhaps no industry that is suffering from the current labor blitzkrieg as much as the railway industry. The apparent difference is largely due to the fact that other industries have been publicly resisting the blitzkrieg.

Proof of the prejudiced and unfair decisions rendered by referees of this board, who are appointed by the National Mediation Board, is available in great abundance. Specific instances might be cited indefinitely; but their general trend is indicated by the frantic efforts of the labor unions to keep the truth about such decisions out of the press, and their unwillingness to permit important decisions to be reviewed judicially and enforced by court action rather than enforced by strike threats. This is a tacit admission that many of the awards are so unjust they cannot stand publicity or judicial review.

The thing that is most wrong with the procedure of the board is the operation of its referee system. When the act was framed it was not contemplated or expected that so many cases would be deadlocked and turned over to referees for decision. The formation of the four divisions of the adjustment board into equal groups of railway and labor representatives was based on the record of the former Committee of Eight. This committee, which, like the present divisions of the adjustment board, consisted of an equal number of management and employee representatives, decided more than 2,000 cases about 20 years ago without a single deadlock.

However, the relations then existing between the transportation brotherhoods do not now prevail; and this has made an extremely important difference in the attitude of labor toward disputes handled by the present board. When the Committee of Eight was functioning, peace reigned among the various brotherhoods; today there are bitter and continuing jurisdictional squabbles between the enginemen and the firemen, the conductors and trainmen, and the trainmen and switchmen. The different unions are now finding members so hard to get and hold as to make it highly inexpedient for any of them to refuse to take to the board any case involving a member of its craft, regardless of the justice of his claim. If this is done, the incensed claimant may join a rival union. How important in some instances each individual member has become is indicated by the fact that on some railroads the transfer of only seven or eight enginemen from the Brotherhood of Locomotive Engineers to the Brotherhood of Firemen would give the latter body a majority of the road's enginemen, and thereby enable it to demand the right to represent all of both the enginemen and firemen on that railroad before the adjustment board.

Bad Operation of Referee System

When the members of a division of the adjustment board disagree a referee is selected by the National Mediation Board who sits as a one-man judge and jury combined. Regardless of charges of bias, selfish political purposes and even excessive alcoholism that have been made against some referees, it is evident that even referees of intelligence, good character and honest intentions must usually be inefficient because of the complexity and number of the cases of which they must dispose in a short time without an adequate knowledge of a highly technical industry. An intelligent and industrious referee could in time become at least partly aware of what was going on; but this is not allowed to happen. Before this time arrives such a referee has wounded the tender susceptibilities of labor and is not re-appointed.

The way in which the Mediation Board selects referees is obscure. What usually happens apparently is that each of its three members in rotation appoints someone that he individually considers qualified. The referees are usually professors of law, sociology or

economics; and very few have had any previous connection with railroading.

Labor has been markedly successful in effectively protesting the appointment or re-appointment of referees that have not suited it; but its efforts have not stopped there. Before the light of publicity was cast upon the activities of the adjustment board its labor members sometimes resorted to the browbeating and insulting of referees until they resigned. Since some important cases have been publicized a new labor technique has been developed — that of finding out what the referee's decisions are going to be and withdrawing the cases if the decisions are expected to be unfavorable.

Railways Must Act—or Quit Complaining

Much more might be said regarding the inequities and injustices which the railways have been suffering at the hands of the adjustment board; but it would serve little purpose here, as everyone in the industry is aware of the situation and there are indications that some of the labor executives might welcome an opportunity to stop hitting below the belt. The question now is—what is to be done about it? The railways cannot afford to go on publicly complaining and doing nothing about it, because thereby they merely invite criticism of management for tolerating continuance of a situation that its own spokesmen declare is indefensible. Have labor and management in the railway industry become so antagonistic that they cannot get together on a basis of mutual trust and understanding and remedy a condition that has become so discreditable to both? The average railway employee is a steady, reliable and responsible citizen. The labor executives have risen from the ranks. The operating executives have for the most part risen from the same ranks. Surely there must be some basis for understanding between these men of identical backgrounds.

There are things that the present board might and should do to rescue itself from the stigma of being a dismal failure in promoting healthy labor relations, such as arriving at a decision as to what constitutes a "case pending." Some permanent agreement on what constitute yard and road service would settle some 1,500 present cases without further bickering and delays. And certainly after six years any group should be able to decide once and for all which division of the board should hear cases involving yardmasters. But while these things are important, the most important thing to do is to solve the problem of getting and retaining referees disposed and competent to make fair and sensible decisions. If this problem is not solved, it will be because there is a complete lack on one side or both of that spirit of cooperation by management and the labor unions in which, only such a short time ago, we were being told was to be found the solution of the entire railroad problem.

Salesmen Needed to Sell the American Way of Life

Strongly urging that the technique of American salesmanship and advertising be applied immediately to the task of selling the fundamentals of self-government to the American people, Philip D. Reed, chairman of the board of directors of the General Electric Company, offered the members of the Sales Executives Club of New York, meeting July 2 at the Hotel Roosevelt, his own "primer of American self-government" as a handy sales manual. The problem is one that should be a challenge to every sales executive in America, he declared, a challenge that must be met if the system of free enterprise and competition under which the arts of sales promotion and advertising have flourished is to be continued.

"It may seem paradoxical that this should be necessary," he continued. "But the stark truth is that we are doing precisely the opposite—*moving towards another way of life —because our fellow citizens have not been told enough or sold enough upon our own American product.* The interest, importance, and value, during the years immediately ahead, of men and women who know and understand the methods and techniques of education, of advertising, and of sales promotion, cannot be overestimated. It follows that those trained in these arts must not only make their influence felt during these formative years, but that they must base their judgments and their action upon a real understanding of the issues, the trends, and the problems with which we as a nation are confronted.

"We have been through ten years of serious economic disorder," Reed said. "During that period we have made progress in certain directions, but none at all in others. No one can question the fact that very real social progress has been made. The difficulty is that social legislation almost invariably costs large sums of money, and can be supported only if the economic condition of the country is healthy and prosperous. We all agree that American citizens should not be permitted to starve, that made work is better than the dole, that old age and unemployment insurance and guaranteed bank deposits are fine and worthy things, that maximum hours and minimum wages are all to the good in sweatshop industries, that reclamation and rehabilitation of the soil is essential, that slum clearance and low-cost housing are much to be desired. But these enactments cost billions in the aggregate, and they can be supported through the years only if our economic system is sound and successful.

"The fact is that the economic record of the past ten years is just as disappointing as the social record is gratifying. It has been pointed out editorially that our national income is back to 1919, our unemployment problem completely unsolved, our national debt up 19 billions, and that *comparing the period 1933-39 with 1923-29, the only significant increases among 22 basic economic measurements were in population, strikes, strikers, federal taxes, federal expenditures, and national debt.* All the other items show a decline varying from 9 to 84 per cent, and include manufacturing employment, industrial production, wholesale prices, factory payrolls, national income, new construction, and corporate financing.

"We must place more emphasis on economic recovery lest, failing to achieve it, we are forced to abandon the social advances of the last decade. For government cannot create wealth. All it can do is redistribute existing wealth.

"A great deal of new wealth must be created to support our social program and this can be done only by increasing output, the production of useful goods."

The Colleges of the Country Are Turning Out Potential Executives for Many Industries—Are the Railways Getting Their Share?

How About the Future?

Are the railways safe in trusting to chance or should they give thought to their need for executives in the years ahead?

WHAT measures are the railways taking to meet their demands for executives in the years that are ahead? Are they safe in assuming that, as in the past, men of the proper calibre will be available as vacancies occur? Or is it a measure of preparedness to follow the procedure of other progressive industries and initiate special measures to attract into the lower positions young men of special ability and education who may fit themselves, through experience and service, for positions of responsibility as vacancies occur? If the latter premise is accepted, does railway service offer opportunities today that are sufficiently attractive to induce young men to select it for a lifetime career?

That these are not academic questions is evidenced by the fact that the American Railway Engineering Association has recently created a committee to develop a closer liaison between the railways and the colleges and universities to further the training of young men for railway service. This committee is charged, among other assignments, to (1) stimulate a greater interest in transportation among students in the colleges; (2) bring about greater co-operation between railway officers and officers of universities and colleges in presenting courses of instruction to meet today's changing railway problems; and (3) develop within the railway industry a greater recognition of the value of collegiate training in railway service.

The increasing interest in this subject is also evidenced among the colleges represented in the Society for the Promotion of Engineering Education, where a session of its annual convention at Berkeley, Cal., on June 24, was devoted to the consideration of training for transportation service under the direction of its Transportation committee, headed by Elmer T. Howson, western editor of the *Railway Age,* as chairman, and with a program including addresses on (a) What a Railway Expects in the Engineering Graduate, by Col. J. W. Williams, chief engineer, Western Pacific; (b) What the Railways Offer the Engineering Graduate, by M. C. Blanchard, chief engineer, Atchison, Topeka & Santa Fe, Coast Lines; (c) After Graduation—What?, by W. H. Kirkbride, chief engineer, Southern Pacific System, and (d) What the Highways Offer the Engineering Graduate, by John J. Skeggs, Division of Highways, State of California; together with the report of the Transportation committee. Abstracts of the addresses by Messrs. Williams, Blanchard and Kirkbride and of the report of the committee follow.

What a Railway Expects in the Engineering Graduate

By J. W. Williams*

The railway expects the engineering graduate to be equipped with a sound foundation of engineering education and trained thought processes, by means of which he can acquire, through experience, the judgment to estimate correctly the problems with which he will deal and arrive at reasonably accurate solutions. Resourcefulness, leadership and technique, developed through experience, will always be essential to an outstanding engineering career, but in addition to a potential capacity for development of those qualities, the young engineer entering railway service today should have the best possible engineering education, as a base on which to build, through experience, a career satisfying to himself and

*Chief Engineer, Western Pacific

of maximum benefit to the railway industry and to society.

Railway expansion, through the construction of new lines, came to an end between 1910 and 1920. Long before that time, problems relating to the increase of capacity and efficiency of existing lines, and their maintenance, engaged the active attention of railway engineers. From January 1, 1923 to January 1, 1940, 6,728 miles of new lines were added to the road mileage of railways of the United States. During the same period 20,305 miles were abandoned and taken up. However, during that period, more than $9,000,000,000 were expended by the Class I railways of the United States for additions and betterments to the existing plant.

The railways are, and will continue to be, the backbone of our transportation system, notwithstanding the extensive development of commercial transportation on highways, waterways, airways and by pipelines. They perform the mass transportation service. The vast capital expenditures made during the last 20 years to increase the capacity, efficiency and economy of operation of the railway plant indicate the field in which the engineering graduate who embarks on a railway career will find his problems today and in the future.

In the observations that follow, I will direct my comments to the student who expects to engage in general railway engineering and not to one who expects to specialize in any such branch as electrical or mechanical engineering, structural design or special research or laboratory work.

Basic Engineering Knowledge Essential

The graduate should have knowledge of the mathematics and methods of plane and route surveying. He should be able to prepare maps and plans and to interpret plans prepared by others. He should have a technical education adequate to enable him to analyze and reach decisions in problems relating to roadway, track and drainage. These problems will, probably, be more constantly before him than any other, throughout his career as a railway engineer, in all grades, from chainman to chief engineer.

Technical knowledge of geology, soil mechanics and hydraulics, which ripened with experience, will give him the tools with which to work in the construction and maintenance of roadway and its protection by drainage. The function of each part of the track structure should be thoroughly understood. The graduate should be able to analyze the stresses in the track resulting from the rolling load of motive power and equipment, of varying weight and design, at various speeds. Properties of the materials used in the track structure should be known. He should have a general knowledge of the methods of manufacture of rail, fastenings and turnouts.

Since the function of the track is to afford a rail-way for the movement of locomotives and cars, the railway engineer should have a knowledge of locomotives and equipment, and particularly of those features directly affecting the track, such as weight and its distribution, wheels and axles and their arrangement, and the counterbalancing of locomotives.

Methods of Working Important

Engineering courses should give some attention to the economical and efficient organization of track laying, ballasting and maintenance forces. Practical experience is, of course, the best teacher of this phase of railway work, but data are currently available to formulate sufficient instruction to the student to prepare his mind for, and arouse his interest in, this subject.

There has been a great change in the methods of track maintenance in recent years due to the introduction of new types of maintenance equipment, and mechanized roadway machines. The engineer must be alert to the possibilities of new tools and the more the graduate knows about these tools and the principles on which they are designed and operate, the better fitted he will be for his job.

The construction, alteration and maintenance of bridges, trestles and culverts always have been and will continue to be an important job of the railway engineer. The curriculum should provide the means for a thorough education in the technical subjects required for this work. Courses should include the adaptability, properties and strength of the various construction materials; dynamics; framed structures and foundations. The graduate should understand the elements of design for wood steel, masonry and reinforced concrete structures. With the benefit of experience, he should be able to design any of the ordinary railway structures. Unless he specializes in structural design, it is not probable that he will be required to design, in detail, any of the special or more intricate structures.

The engineer will need technical training with regard to station and roadway buildings, shops, enginehouses, power plants and fuel stations sufficient to enable him to make thorough and complete functional analyses and to plan the general engineering layout. His problems in water supply will require knowledge of hydraulics and pumping machinery. The treatment of boiler water calls for a basic knowledge of chemistry, which will also be useful in other phases of his work. The design of signal systems and interlockers is a special branch of railway engineering, but the railway engineer should have knowledge of their functions, operation and maintenance.

The design, construction, revision, operation and maintenance of yards and terminals is of great importance and civil engineering courses, to be of most value to the prospective railway engineer, should cover not only the basic technical instruction required for such work, but should be kept abreast of the latest developments of this phase of railway engineering and operation.

Knowledge of Accounting Valuable

Accounting should be included in the civil engineering curriculum and the course for students preparing for railway work should include the principles and methods of application of the accounting rules prescribed by the Interstate Commerce Commission for steam railroads. Instruction should also be given in methods of compiling and using cost data.

Most curricula provide instruction for the engineering student in principles of business law relating to contracts, and in the preparation of contracts and specifications. The engineering principles of valuation and the methods of valuation used by the Interstate Commerce Commission in the valuation of railways should be included in the instruction of the student who is preparing for railway service.

Clear, concise, precise and expressive English, written or spoken, is an invaluable asset in any vocation, including that of railway engineer. Incoherence and confusion in speech and writing conceal and nullify other valuable qualities in many engineers.

The graduate entering railway service, who is qualified by character and ability and who is equipped with a suitable education, has favorable opportunity for ad-

vancement, not only in engineering positions, but also in administrative positions.

As an engineer he will have a technical education, by means of which he can acquire the ability and judgment to meet technical problems. But as an engineer or administrative officer, he will find that the relation of benefits and costs is an important, and usually controlling, factor in each project, practice or subject considered. The relation between cost and benefit will be constantly before him. Seldom can projects be carried out on the basis of purely technical engineering ideals alone. Except in matters relating to safety, the engineer will generally have to modify the perfect engineering accomplishment, to a good engineering accomplishment, the benefits of which justify the cost economically. If he is a good engineer, he will sometimes resort to improvised methods and installations that are not at all to his engineering taste, but are adequate for the purpose. Every project that he plans should be appropriate for its function and sound economically.

Economics should have a prominent place in the engineering curriculum and there should be available for the student preparing for railway service, a course particularly applicable to the economics of railway engineering and operation. Courses in economics of railway location, if not already modified to fit present conditions, should be abridged to eliminate portions that were important during the period of railway road mileage expansion, but are no longer necessary. The courses should be confined to the economics of relocation to reduce gradients and curvature.

The courses in engineering economics should provide the student with basic principles and methods which will enable him to make economic studies of the weight and character of rail, size and type of fastenings, size and character of ties and specifications of ballast entering into the track structure; the value of labor-saving tools and devices; value of the various types of material available for bridges, trestles, culverts and other structures; length and type of bridge spans; value of second and other multiple tracks; signals and interlockers; centralized traffic control; comparative value of flat and hump switching yards; value of treatment of boiler water supply; the modernization of shops and engine terminals and the replacement of old shop machinery and tools with new and modern equipment.

The course in engineering economics should be supplemented by a course in the economics of railway operation, in which the student should be made familiar with the indices currently used as the measure of operating efficiency. He should have a basic understanding of operating reports and statistics. Because of conditions in the world today and to be expected in the future, I suggest that curricula provide instruction in the function of the railways as a vital part of national defense.

A Broad View of Transportation Helpful

The railways are competitive with each other as to service, and with the other agencies of transportation as to service and rates. To evaluate properly and to aid in the solution of the problems of the railways, one should have an understanding of the transportation system of the country as a whole, including the railways, highways, airways, pipelines, inland waterways and coastal and inter-coastal transport; of the inherent advantages and disadvantages of each of these various modes of transport; of the widely varying governmental policies and methods in the regulation, taxation and subsidization of the various public carriers.

Governmental policy, reflected through laws and regulation affecting the railways, demands an ever-increasing portion of the time and attention of the railway engineer and administrative officer. The engineer should have a broad, general knowledge of the history and policies of federal and state governments in the regulations of railways and of the commissions charged with this duty and also the method by which the regulations are applied.

He should also have a general knowledge of the social theories underlying labor relations; the history, organization and functional methods of the railway labor brotherhoods and of the federal and state railway labor acts. A general knowledge of the schedules or contracts between the railways and the brotherhoods fixing the methods of determining compensation and establishing working conditions, will be helpful.

In planning curricula, first place should be given to the courses necessary to provide the student with a thorough technical education, for if he does not obtain that in school, it will be very difficult for him to obtain it afterward. If limitations of time and facilities necessitate curtailment of courses, they should be in the accessories, and not in any essential part of the technical subjects.

Eliminate Non-Essentials

Technical courses should, however, be re-examined and stripped of non-essentials. Subjects and parts of subjects which may have been important at one time, but are no longer needed because of changed conditions, or which are necessary for only a few who will follow some specialized branch of practice, should be eliminated. This may enable the college to broaden the field of education of the student in subjects that will be of very material benefit to his career as an engineer and to his usefulness to society.

At no previous time have the railways had more urgent need for the services of highly intelligent and thoroughly educated young engineers. The quantity demand is, perhaps, not as great as in the days of railway expansion, but the quality requirement is higher than ever before.

What the Railways Offer the Engineering Graduate

By M. C. Blanchard*

The railways, like any other industry, offer the engineering graduate a job when in need of men so trained or educated. I use the word "job" intentionally as the railways offer few, if any, starting "positions." The "position" is something that comes later as a result of work and ability shown on the "job."

It is my belief that a fair number of these jobs will always be available to engineering graduates, for the railways are and will continue to be the largest and most important transportation agency, and as such they will require additions and betterments to meet the demands of transportation incident to the growth and development of our country. This means that their facilities will have to be expanded in certain ways, that they must be maintained and operated, and in all of these activities there are and will be no small number of engineers.

While the number of engineering graduates now employed annually may not be as great as in years past, the probability of steady employment is much greater

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than has been the case heretofore. In the days of great expansion larger numbers of engineers may have been recruited by the railways, but as these expansion projects were completed these men were laid off, thus necessitating their making a search for new employment which was not always readily found. Steadiness of employment, if anything, is more important than the mere securing of a job. Permanency of employment is essential for the acquisition of experience that leads to promotion and in this respect the engineering graduate of today, who is fortunate enough to become employed by the railways, is much better situated than his predecessor of earlier times.

The job offered to the engineering graduate is fundamentally that of apprentice, its nomenclature depending upon the department which makes the offer. The starting rate of pay is not greatly different in any of these departments and, while not large, it compares favorably with that paid by other industries.

Large Opportunities for Engineers

The civil engineering graduate employed by the railway who possesses the qualities necessary for advancement along the engineering line may look forward to being one of 12 system chief engineers, 62 chief engineers, 14 chief engineers of regions or lines, 43 assistant chief engineers, 27 assistants to chief engineers, 60 engineers of maintenance of way, 40 district engineers, 27 principal assistant engineers, 50 bridge engineers, 30 engineers of buildings and structures, 26 valuation engineers, 50 office engineers, 300 division engineers, 185 high ranking assistant engineers, and thousands of assistant engineers of lesser rank, supervisors, and field and office men of various titles.

In addition to opportunities for promotion in the engineering department, the way is open, as it has never been before, to advancement in other departments of the railways, including operating, purchasing and traffic. In years past all but a few of the railways were inclined to look upon the engineer as a technical man qualified for advancement only along the line of his training. This attitude no longer prevails, the railways having come to the realization that the man who is educated in the fundamentals of mathematics and the sciences has qualifications superior to those not so equipped, and if in addition to his education he possesses those other inherent qualities essential to advancement in any line of business, the railways are quite ready to give him an opportunity to step out of his engineering environment into other departments.

In making the above statement I have in mind particularly the railroad on which I am employed. When, upon my graduation, I entered the service of the company there was not a single engineer in any department other than engineering. A few years later, the chief engineer of the lines east of Albuquerque was promoted to operating vice-president, later to president and, on retirement from that position, to a place on the board of directors where he now serves as a most valued and important member. In the last 20 years this picture has changed and numbers of men from the engineering department have been and are being selected for service in other spheres of activity, especially those of transportation and operation. These men are making good, as evidenced by the fact that two of them are now general managers, one is assistant to the operating vice-president, and another is general purchasing agent for the system.

What I have said with respect to the changed attitude of my own road applies equally to other railways and in support of this statement I am listing below the names of a number of men who started their railroad careers in the engineering department and now are high ranking railway executives. [Mr. Blanchard then named 35 executive officers of 17 different roads who started in the engineering department, as indicative of the recognition accorded men of the requisite training and ability.—Editor]

The accomplishments of these engineers have paved the way for greater consideration of the young engineer of today and the future. Therefore, I feel that to the engineering graduate who is transportation-minded; who is alert, energetic, balanced; who is endowed with some native executive ability; who is willing to shoulder responsibilities and to undergo the hard work involved in each step of advancement; who is appreciative of the fact he will be in competition with many other capable and ambitious men, as a consequence of which his promotion can be attained only by proven superiority, a contest in which his engineering education should be of advantage; the railways offer an opportunity better than that in the past, and on a par with any other industry.

After Graduation—What?

By W. H. Kirkbride*

Take the first job offered; study the ins and outs of the task; the whys and wherefores; do the job as told and do it enthusiastically. But I am asked, "when do I display my initiative?" My answer is, "let initiative come gradually and naturally, but above all, let it be founded on discipline, experience and clear thinking; you will find much opportunity to make decisions because, unfortunately, supervision is not likely to be intense."

The man digging a ditch with other laborers is learning how to handle men—that mysterious faculty that some possess and others never learn. The man who saws and uses a stick of timber is learning the practical application of "strength of materials." He, with the ditch digger, can apply his knowledge to a higher order of effort. The man engaged in tamping ties, laying rail and maintaining track for safe train operation has the opportunity of studying, at first hand, principles based on mathematics, scientific research and thinking of the highest order.

The ditch digger, the wood sawer, the tie tamper are illustrative of many occupations of railroading; they can be made stepping stones to higher endeavor by the engineer who reasons and thinks in terms of action or they can become just another job to sweat over.

There will, of course, be some graduates who, by reason of age, opportunity, mentality and preliminary training, find themselves immediately in contact with their specialty, but they are a minority; their good luck will be envied by many of the rank and file but a word of warning to the lucky ones—they may be lulled into a false sense of importance, proportionate values may be lost and life's mode of discipline missed. Here, as elsewhere, reasoning, thinking and expansion of intellectual thought are necessary.

A Broadening Field

Engineers should be educationally equipped to assume many positions in our complicated social economy that are far from pure engineering. If our universities do not so educate, they had better change their curricula, and that right speedily. It is a far cry from the crude

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surveying instruments with which George Washington practiced surveying to the present engineer executive who confidently constructs railroad bridges of great span lengths and sinks their foundation caissons to greater and greater depths, with full knowledge of their load supporting properties.

I do not mean to belittle the rapid advance and profundity of the mathematical sciences that have made such things possible, but more and more the emphasis is placed on administration. The fact that our undertakings are now so large, labor relations so complex and purchasing of supplies so important, makes the executive indispensable and he in turn must, of necessity, assign the execution of work to other men who likewise are executives and they in turn must have superintendents and foremen, and so on down the line—the project becomes primarily a business and the engineer finds himself relegated to the drafting table; to an abstract matter of design, or to staking out the work.

However, there is no occasion for the engineer to be discouraged—the important fact is that these newer jobs do exist; that in free America they are open to all. Success lies ahead if he will only raise his sights and broaden the scope of his ambition, for he, too, can be the superintendent, the top executive or the successful contractor who has mastered mass production.

And this leads to this further thought—why should the engineer confine his attention to jobs of an engineering nature? Business offers many worthwhile positions where engineering knowledge is an essential qualification. Railroads and other large corporations draw on the engineering profession frequently for their presidents, chairmen of boards and other administrative positions.

An Era of Change Ahead

What of tomorrow? Are the railroads a completed facility, leaving no more construction to perform? Obviously, the answer is no! If they are to serve the public, they must render adequate service—measured by the yardstick of the then-popular demand. Adequate service means expansion. For as the country grows, so must the railroads grow; they cannot stand still. Growth and expansion demand construction—not necessarily growth and expansion in the sense of more mileage, but rather better mileage. Notwithstanding inroads of the automobile, truck, airplane and water carriers, the railroads still stand (when all costs are considered) as the most efficient mass-transport carrier ever developed by man.

There is great need to rebuild and reconstruct much of the nation's railroad plant. For instance, there is a pressing construction problem brought about by the increasing speed of train operation. Revision of alinement and grade is necessary; much curvature must be eliminated and remaining curves reduced to long radii; gradients must be reduced, summits lowered and rolling grade flattened out; highway crossings must be eliminated; sidings must be made longer and switches placed under remote control; double track will not only be desirable, but a necessity.

Multiple tracks will be required to enter cities, and these must be elevated. Train and engine terminals need revision and enlargement; classification yards, with humps and car retarders, are required in many places. Along with engine-terminal improvement there will be required enlarged machine shops and engine houses of new design to accommodate modern types of equipment and power. New fuel facilities, enlarged tanks and water columns, hoists, stores, inter-communicating and pneumatic systems, are all part of the new demand.

Fast freight trains, in combination with truck pick-up and delivery systems now in vogue, have shown the pressing need for freight house modernization, calling for new buildings and facilities. Passenger stations and terminal facilities likewise need reconstruction, not only on account of the inability of many of the carriers to perform adequate maintenance during late depression years, but due to demands brought about by changing traffic conditions.

Offers Opportunities

I have noticed in conversations with engineering students, as well as with more mature persons who otherwise were well informed, a surprising lack of knowledge of railroad construction and organization. A railroad is a transportation agency engaged in the mass movement of persons and commodities over land; this movement being accomplished by the apparently simple expedient of running cars on wheels over two rails placed 4 ft. 8½ in. apart. This statement may seem trite and academic but around it the largest industry of America has been developed. Complete interchangeability of cars is made possible by one gage of track and cars common to all roads.

This system did not grow without planning. Every detail of organization, of locomotive and car designs, of location and grade development, bridging rivers, tunneling mountains, and track construction called for the application of profound thought by men of great power and intellect. Research and the conclusions of scientists are reflected in that which to most of us has become commonplace.

The number of employees found on a large railroad will be in the order of 50,000. Railroads have tried various means for the selection of their personnel with particular reference to advancement to the higher positions, but the industry is committed to that characteristic of American fair-play by which the lowest in rank may aspire to the highest positions and acknowledges the authority and leadership of the man who has fought his way to the top.

The exact method by which a graduate of a university obtains employment with a railroad and acquires the experience that will enable him to advance to positions of greater responsibility is a matter of secondary importance. More important is to show that the opportunity exists. The railroads are not a thing of the past. A large field of endeavor still exists for those who wish to try. We offer you labor and sweat—it is a principle that gave us the present America.

Report of Transportation Committee

Until within the present generation the railways comprised our principal and almost our sole agency of transportation. Within a period of less than a century they created a vast network of lines reaching every corner of the country and opening it for development. For many years, the building of railways comprised the great part of all construction activities and the graduates of the engineering colleges found their most numerous and most promising opportunities here in design, survey and construction. Of late years, the era of railway construction has largely drawn to a close, and as a result, the railways no longer offer the romance and thrill that are so alluring to young men of pioneer spirit.

Within recent years, other agencies of transportation have been developed on the highways and in the air. There has also been a revival of transportation on the

inland waterways. These agencies and especially the highways, have offered to young engineers opportunities analogous to those previously mentioned in the railway field and many have gone into this service. Up to the present, the highways have offered constantly expanding programs of new construction that have gone far to attract the young men who formerly found employment on the railways. Obviously, there is a limit here, as with the railways, to the continued expansion of highways. Possibly this day is not far removed. When it comes, the lure of bold construction will also wane here and the college graduate will be forced to look to still other work.

From Construction to Operation

And yet as the essential components of these transportation agencies are completed and expansion approaches an end, we face the fact that these agencies must be maintained, rebuilt and operated. Furthermore, with duplication of service and the competition that arises therefrom and with a large surplus of facilities in order that the public may receive the best and most economical service with the minimum of waste, so that each agency may be perpetuated in those services or fields to which it is best adapted. This calls for managerial and executive ability of a high order—ability for which an engineering training should be invaluable.

Take the railways for an example, especially as they are still the nation's largest agency of transportation. They are no longer building long extensions into new and unsettled areas. On the contrary, they are actually taking up more miles of lines today than they are building. Their principal activities in the field of construction are the rebuilding of facilities to meet new and changing conditions and the reconstruction of lines and structures to effect greater economy or efficiency in transportation. Such activities require intensive study of present and possible practices, with relation to costs, both of construction and of operation. They call for the display of analytical ability as great as or even greater than that of the pioneer engineers who located our railways over the mountains and across the plains.

But it is ability of a different character and developed through education and training of widely differing purpose. It requires a more thorough appreciation and knowledge of economics, as applied to transportation—a greater willingness to work out refinements in practice to effect economies in costs and to increase effectiveness in service. In brief, it requires a far greater degree of exactness.

To the young man of engineering education who accepts this view, the railways offer real opportunity. No industry so basically important in character, no industry whose business totals $3,000,000,000 to $5,000,000,000 annually or that employs a million to a million and a half persons annually, can fail to provide opportunity for analytical and executive ability of high order.

In the face of this readily demonstrable need for engineering ability of a high order, it is disconcerting to find the colleges and universities giving less consideration to the training of young men for service in the transportation industry, and notably for the railways. As a corollary, fewer young men are today preparing for service with these agencies of transportation. It is contended by the colleges that these agencies, and especially the railways, fail to meet the competition of other industries for these young men. And it must be admitted that there is much evidence to support this view. On the other hand, not a few railway officers contend that the colleges have failed to revise their courses of instruction to keep pace with the changes in railway operation and that as a result the graduates of today are not prepared either in view point or training for their needs of today. And it must be admitted also that a survey of college courses of instruction will provide much in support of this position.

The committee concluded its report with recommendations that studies be undertaken (a) to determine what the transportation agencies desire in their graduates in the way of training and what further opportunities they can offer graduates so trained—this study to be subdivided between the various transportation agencies, such as the railways, the highways, etc., and (b) to study the curricula and teaching materials now offered students preparing for transportation service as well as those who desire fundamental information regarding the place of transportation in industry preparatory to entering industry, to determine the extent to which they meet the present-day requirements of these agencies and also where and in what ways they should be revised.

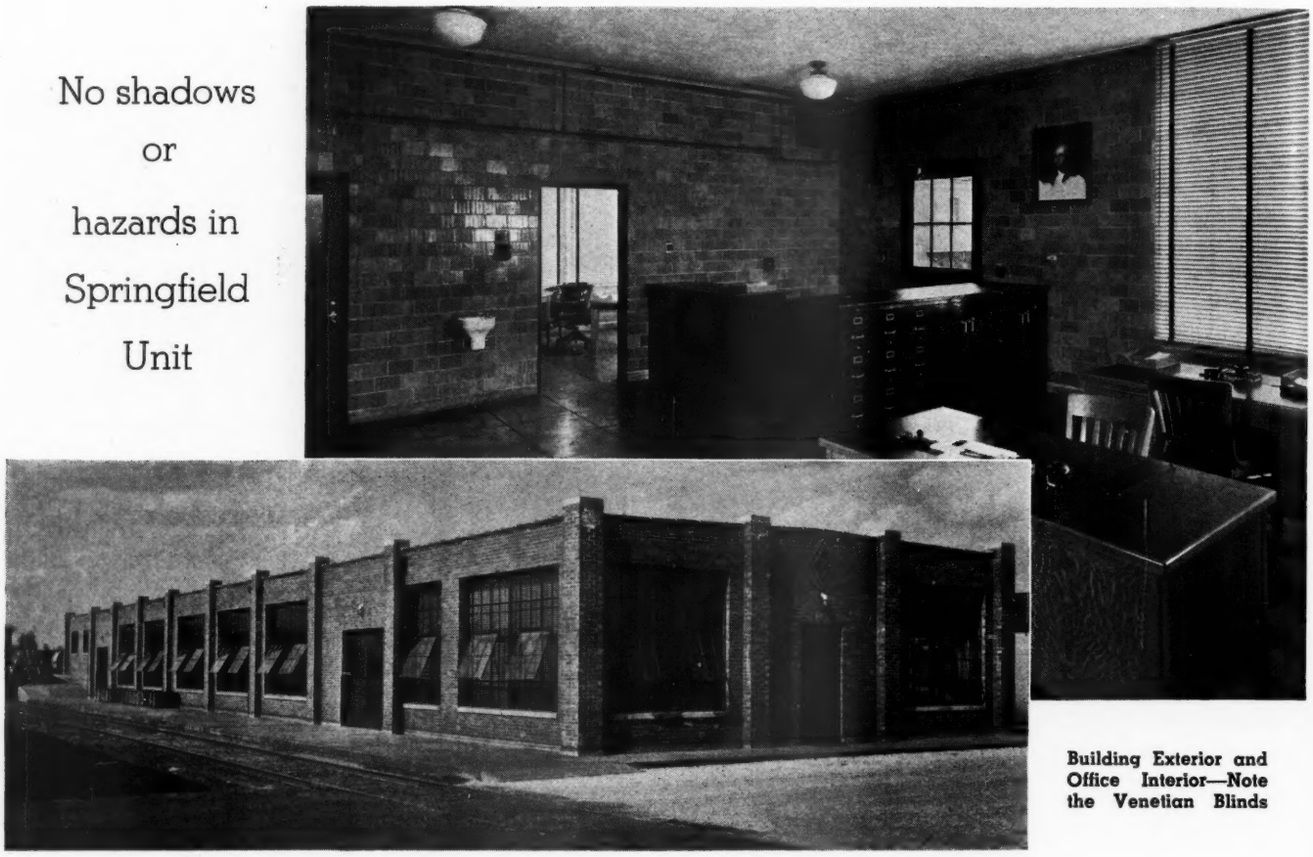
* * * *

Photo, R. Kindig

S. P. Locomotive 4115 With No. 26, the "Owl," Nearing Glendale, Calif.

C. & I. M. Builds Model Storehouse

No shadows
or
hazards in
Springfield
Unit



Building Exterior and Office Interior—Note the Venetian Blinds

THE Chicago & Illinois Midland, operating 131 miles of railroad between coal mines in central Illinois and Peoria, has completed a new storehouse at Springfield, Ill., which is one of the few railway stores buildings constructed in recent years; it is also a landmark in small storehouse design and equipment.

The new storehouse is a one-story structure of brick, 40 ft. wide and 160 ft. long, which is built at ground level with the exception of a rear platform for loading and unloading cars or trucks and storing castings. The building is of the pier and panel type construction, consisting of square brick columns anchored to reinforced concrete pedestals with panels of brick wall 8 in. thick between piers. The walls are continuous on the inside of the building but on the outside the piers extrude from the face of the building and project several inches above the roof line, giving the building a buttress appearance. The front wall is slightly higher in the middle than at the edge for architectural affect. The concrete foundation under the walls is reinforced and is carried several inches above the ground line and the walls are capped with decorative tile. On all sides are metal sash windows 8 ft. 6 in. high and from 6 ft. to 12 ft. 3 in. wide. The building has five entrances each with steel doors with wire glass windows. The two doors on each side of the building are large enough for the free movement of material handling equipment.

A flat roof, consisting of interlocked steel decking overlaid with insulating board and composition roofing, covers the store. This roof is supported on trusses of expanded steel fastened to H-beams extending across the building from each wall pier to 4½ in. circular steel columns filled with concrete. This construction gives 11-ft. headroom in the building. Roof drainage is carried through the walls to down spouts on the outside.

The building has a concrete floor and is surrounded by a concrete platform. This platform or pavement is 6 ft. wide in front of the building, approximately 10 ft. wide on each side and the rear platform, which is built car-door high, extends 50 ft. out from the building. Ramps on each side of the building connect the ground walks with the rear platform. Metal contraction joints and pre-moulded bituminous expansion joints were used in the construction of the floors and outside platforms and the concrete was treated with a hardener to increase its resistance to impact and wear from trucks.

Steel Shelves—Venetian Blinds

An 8 in. cross wall of brick fitted with a self-closing steel door is erected inside the storehouse at one end to form a storeroom for stationery and the forward end of the building is partitioned off with glazed tile to form three rooms, one 23 ft. wide and 26 ft. long for clerks, office files and visitors, another 13 ft. by 15 ft. for the storekeeper and a smaller room for a washroom. The inside walls of the storerooms and stationery rooms are plain brick and the ceiling construction of the main storeroom is exposed while the stationery room and offices have ceilings of plaster applied to suspended metal lath. The surface of the concrete floor in the offices contains a red pigment and is cut into large squares to render the interior of the office pleasing to the eye and

the four large windows in each office are fitted with venetian blinds of steel which combine with the decorative walls and floors to give an attractive appearance to the interior. The entire interior is heated by automatic blower units suspended from the ceiling.

All bins, shelves and cases in the building are steel. In the storeroom are nine sections, each 18 ft. long, and four sections 12 ft. long while the stationery room has six sections of shelves 18 ft. long,—producing in the aggregate about 10,000 sq. ft. of shelving. One section of shelves in the stationery room is fitted with doors and locks. The storeroom also has several all-steel racks and bins for holding brooms and similar items not easily stored on shelves, and the equipment in the storeroom also includes 12 all-metal floor tanks with individual hand-operated metering pumps for lubricating oils. This oil unit has a chain block and rack for emptying barrels and automatic fire extinguishing equipment is suspended over them. All equipment is separated by wide aisles to permit the free movement of material-handling equipment.

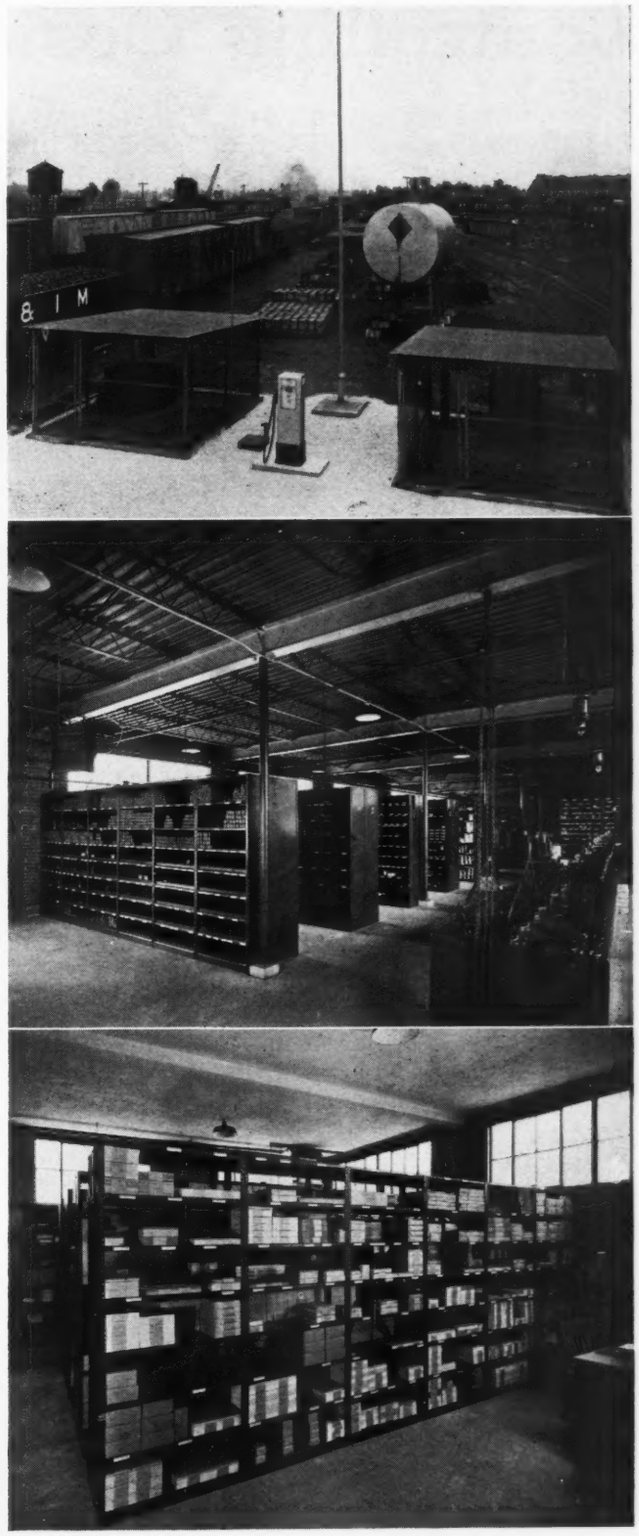
Highly inflammable gases and oils are stored outside in front of the storehouse. Oxygen and acetylene are confined to separate sheds, each consisting of a concrete platform with a corrugated iron roof supported on steel shapes and entirely enclosed by wire netting. Gasoline for local consumption is stored underground and drawn by a gasoline station type metering pump standing between the oxygen and gas sheds. Fuel oil is stored in an overhead tank to the rear of the gasoline station and is carried by underground piping to a metering pump in the shop which is read each day to obtain the daily consumption for accounting purposes.

Landscaped Grounds

The new facilities are located on a 40-acre tract of land on the outskirts of Springfield which is being landscaped. The store is near the shops and car repair yard but is situated where all material at this point, including the railroad's stock of rail, ties, timber and other roadway, water service and electrical materials as well as station supplies for the railroad and supplies used locally for locomotive and cars, can be consolidated and still allow ample room for expansion. This area has two tracks, one on each side of the storehouse, and is surfaced with sand, cinders, gravel and crushed stone and a new highway has been built which permits vehicles to pass through the lumber and tie yard to the receiving platform of the storeroom without crossing any tracks. The improvements cost approximately $40,000 and are part of the modernization program at Springfield which the railroad began in 1930 and which includes to date the enlargement of a ten-stall engine house, a new stationary boiler plant, machine shop, wash room and a new freight-passenger station. The previous store facilities replace a collection of wooden buildings which were built in the early 1900's.

The C. I. & M. carries about $435,000 of unapplied

(*Continued on page 80*)



Outside Storage for Inflammables and Interior Views of Storerooms

International Truck for Handling Material at Springfield

Controlling Costs by Supervision

How records can be set up to facilitate check of those operating expenses which vary with traffic only if kept under continuing scrutiny

By E. H. Bunnell

Vice-President, A. A. R.

IN the development of any plan for the supervision of railway operations by means of performance records and statistics, the operating expenses which the plan is designed to keep under continuing scrutiny will be found to fall more or less naturally into three general classes. There are those expenses, such as maintenance outlays, which are definitely controlled by budgetary allotments; the costs which vary with the volume of traffic; and a third group, subject to variation only by check and supervision.

The latter comprise the subject-matter of this article—the third in a series of non-technical summaries from a general work on present-day problems of railway accounting which the author has in preparation. Previous articles, dealing with statistical controls for the other two general classes of expenses, were: "Controlling Maintenance Outlays," which appeared in the *Railway Age* of December 24, 1938; and "Keeping the Variables Variable," which appeared in the issue of September 2, 1939. The whole system, as noted in these previous articles, has stood the test of practical railroading on the St. Louis-San Francisco where the author formerly served as chief accounting officer.

Among the miscellaneous group of items, which must be watched by supervisory officers if an all-embracing operating efficiency is to be achieved, are the locomotive fuel performance, costs of handling engines and of locomotive lubricants and supplies, enginehouse expenses, locomotive repairs, average miles per car per day of freight cars, excessive detention of cars, empty car miles, and labor expenditures for coach cleaning. Also, attention must be given to the prevention of loss and damage to freight in transit. Suitable and timely statistical records for all this necessary watchfulness are, we believe, provided by the set-up described in broad outline herein.

Checking Locomotive Fuel Performance

For checking locomotive fuel performance four monthly statements are prepared by the statistical bureau in the office of the car accountant. First, there is the statement showing fuel performance by operating divisions, separately by freight, passenger and switching service. Data for the current month are compared with those of the previous month and the same month of the previous year; and the operating division showing the best performance in the current month is placed at the top of the list, with other divisions following according to their performance. Similar data are shown for each of the periods compared. The freight-service data on the statement shows the pounds of fuel per 1,000 gross ton-miles, the per cent of the previous year and the increase or decrease; and the gross tons per train-mile.

The former is based upon quantities of fuel used as reported by the fuel department in the office of the auditor of disbursements, while the gross-ton and train-mile figures come from the "Daily Statement of Freight and Mixed Train Performance," described in the aforementioned article which appeared in the *Railway Age* of September 2, 1939. The monthly statement's summary of actual fuel performance by freight locomotives enables supervisory officers to appraise the effectiveness of the day-to-day supervision based on the daily statement. In similar fashion the applicable data are gathered and presented for the monthly statement's showing of fuel performance by passenger locomotives and by switching locomotives. Copies of the statement are furnished to division superintendents, the general manager, the chief operating officer, master mechanics, the superintendent of motive power, fuel agent and chief accounting officer.

The second of the four monthly fuel-performance records is that showing by percentages the increases or decreases (compared with the same month of the previous year) in various factors affecting locomotive fuel performance; this compilation supplements the statement of monthly locomotive fuel performance by divisions, and is used to explain fluctuations shown thereon. It shows separately for each operating division and important terminal the percentage changes in such freight-service factors as gross ton-miles, tons of fuel consumed, locomotive-miles, gross tons per train-mile, pounds of fuel per 1,000 gross ton-miles, tractive effort per train-mile, and gross ton-miles per train-hour. Similar data are shown for passenger, switching and terminal services.

Next comes the general statement showing all factors relating to locomotive fuel performance for the entire line, comparing the current month with the previous month and the same month of the previous year. This reflects the necessary data for the entire line, including costs and other factors which are needed by supervisory officers to enable them to secure the utmost economy and efficiency in the operation of locomotives. Copies go to division superintendents, the general manager, the chief operating officer, the superintendent of motive power, the fuel agent and the chief accounting officer.

Finally, to round out the picture, there is the statement of monthly fuel performance in freight service by directions. The data shown on this statement are pounds of fuel per 1,000 gross ton-miles, separated to show the performance in through, local and branch-line service and between eastbound and westbound. Copies go to fuel supervisors, the fuel agent and the chief accounting officer.

Operating costs of passenger motor cars are shown on a separate monthly statement, prepared by the statistical bureau in the office of the car accountant, to show comparisons of the present month with the previous month wth respect to such items as labor, fuel, lubricants, repairs and miscellaneous materials. Unusual fluctuations in the cost per mile are investigated. The chief operating officer, master mechanics and the superintendent of motive power get copies of this statement.

Costs of locomotive lubricants and supplies are set

forth with comparisons with the previous month and the same month of the preceding year in a monthly statement prepared by the division and stores accountant for master mechanics, the superintendent of motive power and the auditor of disbursements. Setting up its data by each point where locomotives are serviced together with a recapitulation by operating divisions, this statement shows the number of locomotives handled, also the total cost and cost per engine for lubricants and for supplies. Costs of handling locomotives are checked by means of another monthly statement which develops a total cost per engine-hour from such factors as the number of engines handled, hours of labor, wages paid, material and stores, and miscellaneous charges. Copies of this statement, which includes comparative figures for the previous month and the same month of the previous year, go to division superintendents, the general manager, master mechanics, the superintendent of transportation, the auditor of disbursements and the chief operating officer. Still another statement on the servicing of rolling stock is that designed to check the labor expenditure for coach cleaning and compare it with an allowance allocated for this work to each operating division and individual cleaning points thereon. This statement shows the number of cars cleaned and the average cost per cleaning for the current month as compared with the previous month and also the same month of the previous year; copies are furnished to master mechanics, the superintendent of motive power, the chief operating officer, and the auditor of disbursements.

Highlighting the transportation-expense picture is the monthly statement prepared by the chief accounting officer, showing a comparison of Operating Expense Accounts No. 371 to 420, and the ratio of each account to gross earnings for the road as contrasted with other carriers in the same general territory. This statement also shows the same comparisons of operating expenses by the following general accounts: Maintenance of way and structures, maintenance of equipment, traffic, transportation, miscellaneous operations, general, and transportation for investment, cr. Still another comparison is made to show the ratio of each class of expenses to operating revenues, as follows: Supervision, station service, yard service, train-engine service, train service, miscellaneous, casulaties, and total; hire of equipment — net is also compared in the total. Copies of this statement go to the president, the chief operating officer, the superintendent of motive power, and the general manager. In addition the president gets a letter (with copies to the chief operating officer and general manager) to give him a concise summary of the statement's data and show the rank of this road among comparable lines.

Scheduling Locomotive Repairs

Locomotive repairs are kept on an efficient basis through a plan of scheduling them through the back shop. When traffic conditions warrant its full functioning, this schedule system contemplates the definite determination in advance of the minimum number of days required to complete various classes of repairs, based on a given force and given number of working days. Individual schedules to cover work performed in each of 27 departments of the shop are prepared and cover all phases of such work. Meanwhile, the master schedule sheets (permanent records revised only when there is a change in the working days, in the number of men employed, or in shop methods) show each individual schedule and the various operations thereunder. Then there are the schedule statements covering the locomotives undergoing repairs, the individual schedule cards for each locomotive delivered to the foremen of the various shop gangs, and the material cards covering materials ordered after locomotives are placed in shops. The schedule supervisor makes a daily check of individual schedule cards and reports to shop superintendents any operations delayed or running behind schedule. After all operations indicated on individual schedules have been completed, the schedules are taken to the shop office; dates of completion are entered on the above-mentioned schedule statements; and the days ahead or behind schedule are computed. A "monthly balance sheet" for the use of shop foremen, superintendents, and other supervisory officers is prepared to show all engines undergoing repairs, together with the number of days ahead or days behind for each schedule and for each locomotive. Total days ahead or days behind for all engines, for each schedule and the grand totals for all engines and all schedules are shown. The departments or gangs responsible for delays, if any, are indicated opposite appropriate schedules and under the particular engines delayed.

An important feature of the whole system is that which contemplates that a special representative of the mechanical department will spend all his time in the field checking special activities under the jurisdiction of that department. Among the more important items checked by this special representative are the joint facility bills, enginehouse expenses, coach-cleaning expense, oilbox packing expense, and charges made to the mechanical department by other departments; also, he handles special investigations in connection with expenses incurred on line and charged to accounts for which the mechanical department is responsible.

Freight-Car Utilization

Performance in connection with freight-car utilization is checked by means of a series of statements, including the semi-monthly report of the freight-car situation which goes to the general manager, the chief operating officer, the superintendent of transportation and the chief accounting officer. This statement shows the number of foreign, private, and home cars on line; also, the number of home cars on other lines. It sets up such data for ready comparisons with previous periods, and, when coupled with the comparative statement of cars owned and on line by classes of cars, it aids materially in the work of regulating the receipt and distribution of cars.

Next are the statements showing the per cent empty to total car-miles, which goes to the general manager, the chief operating officer, and the chief accounting officer; and the average miles per car per day of freight cars, which goes to superintendents, the general manager, the chief operating officer, and the superintendent of transportation. Then come the car detention reports with their set-up for bringing out and correcting excessive or avoidable delays.* Among these reports are the notice of car delayed over 24 hours for switch-engine service, which is prepared daily by the yard office and delivered to the yardmaster as early in the day as possible; also, the report of all cars similarly delayed, which is prepared by the chief yard clerk or agent and furnished to the general yardmaster with copies to the terminal or division superintendent, the superintendent of transportation, and the car accountant. The general yardmaster reviews this report and, so far as possible, arranges such switch-engine service as will prevent delays to cars. Finally, there is the daily report of cars on hand over a "standard" number of days prescribed

* See "Systematic Check Cuts Freight Car Detention," by H. W. Johnson in *Railway Age* of June 8, page 1008.

for each point; it goes to the terminal or division superintendent with copies to the superintendent of transportation and the car accountant. Field supervision of this system of reports on car detention is maintained through a representative of the car accountant, who sees that reports are kept in proper operation, particularly with respect to proper assignment of causes of detention as reported by local forces; also, he makes sure of the prescribed follow-up on specific cases of delays.

Loss and Damage to Freight

Supervisory records designed to record and classify loss and damage to freight in transit begin with a statement maintained by the chief accounting officer, showing total charges to Account 418—Loss and Damage Freight, and its ratio to freight revenue. In this way the attention of the management is directed to any substantial fluctuations in loss and damage payments. The investigation and settlement of loss and damage claims is under the jurisdiction of the superintendent of freight loss and damage claims, who reports to the general manager. The accounting is subject to a final audit by a bonded employee located in his office but reporting to the accounting department. Individual claims amounting to more than $500 are paid by voucher certified personally by the superintendent of freight loss and damage claims, the general manager and the chief accounting officer and vouchers in amounts of $1,800 or over are approved by the trustee, personally. Accompanying the voucher, in addition to the complete claim file, must be a full explanation in brief or summary form of the cause of the loss or damage, responsibility therefor, action taken and method adopted to prevent a recurrence of similar loss or damage claim. A review of the claim papers by the chief accounting officer may suggest to him where the Accounting Department representative can assist in the elimination of some of these claims.

The jurisdiction of the superintendent of freight loss and damage claims also embraces the loss and damage claim prevention work and the preparation of rules and regulations. Any necessary disciplinary action is taken by the general manager for violation of these rules and regulations.

An intensive and systematic campaign on the Frisco conducted over a period of years with the assistance of all officers and employees resulted in greatly reducing expenditures for loss and damage. Their standing in respect to the ratio of loss and damage claim payments was reduced by means of this continuous campaign from third from the highest to third from the lowest of the principal Class I roads. In this campaign every known method and device was employed, including impact recorders, veri-checkers (rechecking the loading of l.c.l.), keeping cigarettes and other valuable merchandise under lock and key prior to loading or delivery and making final inspection and light repairs to box cars while loading on house tracks, particular attention being given to the removal of protruding nails.

While it is true the Accounting Department is somewhat removed from the physical handling of freight, nevertheless, considering the importance of conserving each dollar of revenue, every railroad employee should be alert in the effort to keep these loss and damage claims at a minimum. The rapid decline in the margin of profit in freight rates, as competitive forces whittle the rate structure downward makes this imperative. For every dollar paid out in claims it now takes from eight to ten dollars of new business to make up the loss.

As accounting department representatives travel over the property in the daily performance of their duties, intelligent observation, and reporting of the facts noted, can assist. They spend considerable time at stations, and much of a constructive nature could be observed and where necessary the facts reported. The condition of platforms and freight sheds; handling of shipments over station platforms and in warehouses; condition of tracks and right of way; whether the freight house doors are kept closed when not in use; leaking cars—all these and many other factors enter into the problem. When it is realized that the loss and damage to freight in the United States amounted to the total freight revenue received for transporting over 250,000 carloads of beverages — almost enough to offset the entire beverage revenue — it will be apparent that every employee who can render constructive assistance should participate, to the fullest extent possible in the prevention work.

C. & I. M. Builds Model Storehouse

(*Continued from page 77*)

material on the railroad, of which approximately $250,000 is carried at the Springfield store, consisting of approximately $200,000 of bridge and building and maintenance of way materials (principally stored outside) together with approximately $10,000 of stationery supplies and about $40,000 of car and locomotive materials. The latter is obtained by transfer from the railroad's general store at Taylorville, Ill., where the railroad's principal shops are located. Each item of stock in the new store has a code number which is attached to all labels on all shelves and bins and all withdrawals are recorded on punch cards which are submitted twice daily to the accounting department for machine accounting. Twice each week the accounting department furnishes a list of the issues to the store and these are posted in the stock books for use at inventory time in determining the replenishment.

Mechanical equipment consists of a rail crane equipped with a 36 in. magnet and a 4-ton capacity gasoline off-rail tractor equipped with a stiff leg crane. The store also has a new International Harvester truck which makes all deliveries of material in the Springfield area, including the general office. The truck also makes weekly or semi-weekly trips to the heavy repair shops at Taylorville about 30 miles south of Springfield. To facilitate handling, cross ties at Springfield are so piled that several ties can be lifted and loaded into cars at one operation.

The new storehouse was constructed under the direction of C. H. Paris, chief engineer, from plans and specifications prepared by the architectural firm of Murry H. Hanes and is operated under the general direction of F. L. Schrader, vice-president.

* * *

These Buildings House Customs and Immigration Officers at Malone, N. Y., About Four Miles South of the Canadian Border on the New York Central's Adirondack Division

C. & E. I. Is Re-Organized

First major road to emerge from trusteeship under a new corporate set-up

Charles T. O'Neal
President, Chicago & Eastern Illinois Railroad Company

WHEN the newly organized Chicago & Eastern Illinois Railroad Company was incorporated in Indianapolis, Ind., on June 27, this action marked the first emergence from trusteeship of any of the major roads who were victims of the depression starting in 1929. At the first meeting of the board of directors in Chicago on July 2, those officers who have piloted the road through the difficulties of trusteeship were elected executives of the new corporation.

Charles T. O'Neal, who has been president on the trustee's staff and active operating head of the railroad throughout the trusteeship, was elected president of the new company. Other corporate officers are: J. B. Ford, vice-president; G. A. Burget, secretary-treasurer; W. A. Ragel, comptroller; W. M. Templeton, assistant secretary; J. C. Sites. assistant comptroller; and N. E. Helme, assistant treasurer. K. D. Steere, C. T. O'Neal, W. D. Fowler, B. Wendell and J. W. Barriger, III, were elected members of the executive committee and these men, together with W. H. Hays, J. B. Graham, R. C. Graham, R. C. Hyatt, F. O. Watts, R. L. Hoguet, E. J. Conroy and A. S. Igleheart, constitute the new board of directors.

The C. & E. I. is a strategically located railway, extending from Chicago to the Evansville, Ind., St. Louis, Mo., and Thebes, Ill., gateways. It operates 925 miles of first main track, and, as shown on the accompanying map, it is not burdened with an excessive mileage of branch lines. It is an important coal-carrying road, some 70 per cent of this traffic originating at mines along its lines in Illinois and Indiana. It also handles a considerable volume of perishables from Florida and the Southeast as well as agricultural products from the fertile territory it serves. A large volume of general traffic, manufactured products and L. C. L. is also handled, particularly from Chicago, Evansville, Terre Haute, Danville and St. Louis. Its traffic density, as measured by ton miles of revenue freight per mile of road operated, was 1,343,444 in 1939, and the freight revenue per mile of road was $12,950.

The C. & E. I. is also an important passenger carrier, particularly in Chicago-Florida traffic. During the last winter season, for example, it handled 44 per cent of the total passengers carried by the four Chicago railroads which operate through Chicago-Florida service.

The New Financial Set-Up

The capitalization of the re-organized company, apart from outstanding equipment trust certificates, is substantially as follows: Evansville Belt Railway Company bonds, $142,000; prior-lien bonds, $11,053,000, plus such additional prior-lien bonds as are pledged to the Reconstruction Finance Corporation; income bonds, $15,354,-500; preferred stock, $15,354,500 out of an authorization of 20 million dollars; no-par-value common stock, 343,297 shares, out of an authorization of one million shares. Claims entitled to priority over existing mortages are to be paid in full in cash without interest within four months after the re-organization, and A, B and C equipment trust certificates are assumed by the new company. The outstanding trustee's certificates will be paid in full in cash. Within two months, the company is required to pay its indebtedness to the Railroad Credit Corporation, with interest, and $2,736,000 of the first consolidated mortgage bonds are to be paid in cash with interest.

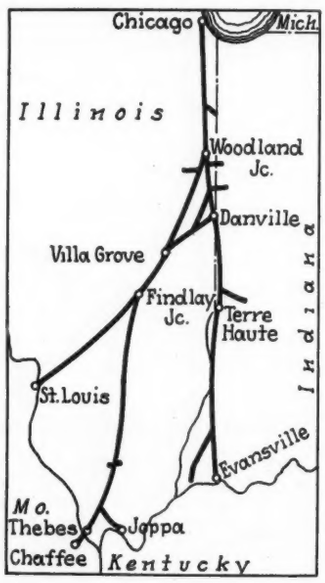
The general mortgage bonds issued originally in units of $1,000 are to be redeemed by exchange for $500 in new preferred stock and $500 in new income-mortgage bonds. In lieu of the interest due on each of these bonds, the bondholders will receive four shares of the new common stock. The preferred stockholders will receive the new common stock in exchange, share for share. The new no-par-value common stock will be issued to the extent necessary to carry out the provisions of the re-

organization plan and holders of this stock have the right of cumulative voting in the election of directors. The new preferred stock is of $40 per share par value and entitles the holder to an annual dividend of $2 per year, unpaid dividends being cumulative only to the extent that income is available for dividends in any year.

History of Trusteeship

On April 18, 1933, the company filed a petition under Section 77 of the Federal Bankruptcy act, and, on September 15, 1933, Charles M. Thomson was appointed trustee. He served in this capacity until August 29, 1939, when he accepted a similar position with the Chicago & North Western and was succeeded as trustee of the C. & E. I. by Benjamin Wham. Meanwhile, C. T. O'Neal, who had served as president since December 31, 1930, continued to serve as president and active operating head of the company on the staff of the trustee.

The reasons for the trusteeship were to be found, of course, in the general business conditions existing at the time, but the adverse traffic situation was rendered particularly acute on the C. & E. I. because of the large



decreases in coal traffic, a commodity which normally accounts for between 25 and 30 per cent of the railway's total revenues. In 1930, for example, only 4,149,060 tons of bituminous coal were handled, as compared with 5,300,882 in 1929. Of this total decrease of 1,151,822 tons, 705,471 tons were accounted for in decreased loadings from mines located on the C. & E. I. The coal traffic declined 1,152,605 tons more in 1931 and 80,219 tons in 1932. In other words, the road handled 2,384,,646 tons less coal in 1932 than in 1929. Faced with this situation, complicated by decreases in all other commodities, the application for trusteeship was the only alternative.

An Aggressive Trusteeship

Despite the necessity for the trusteeship, the management continued a progressive policy of rebuilding the railroad and increasing traffic. Among other means initiated to develop increased traffic was the establishment of a coal service bureau, to aid the producers, carriers and consumers. This bureau was established on December 15, 1938, and maintains a permanent coal exhibit and research headquarters at Chicago for the purpose of research and education in the proper use of various types of coal and the treatment and use of various types of heating and power units to promote coal fuel economy. Further purposes of the bureau are to reduce air pollution and to assist the industry to sell more coal. The bureau is in charge of a combustion engineer who is available to users and consumers of coal for assistance and advice.

As stated above, the C. & E. I. handles more Chicago-Florida passengers over its Dixie route than any of the competing railways in this service and this percentage has been considerably increased during the trusteeship. During the 1940-1941 Florida winter season, this service is to be increased still further through the addition of a streamlined coach train between Chicago and Miami, this being one of three trains to be operated on succeeding days by the C. & E. I., the Pennsylvania and the Illinois Central.

The road has been maintained in excellent shape during the trusteeship and much has been done to improve the property. No major projects have been attempted, although a new passenger car shop was built at Danville, Ill., in 1938, to replace a structure destroyed by fire. However, the maintenance of way and maintenance of equipment programs have proceeded on a sound basis. During the six years of trusteeship, more than 160 miles of new 112-lb. rail was laid, replacing lighter rail, and nearly 900,000 treated ties were installed. The C. & E. I. was the first road to adopt automatic train control and is one of the pioneers in the use of treated ties, which are now universal throughout the railroad. In the last six years, much obsolete rolling stock has been scrapped and retired. At the same time, many serviceable freight and passenger cars have been rebuilt and some new equipment has been purchased, including several Diesel-electric switchers and modern box cars.

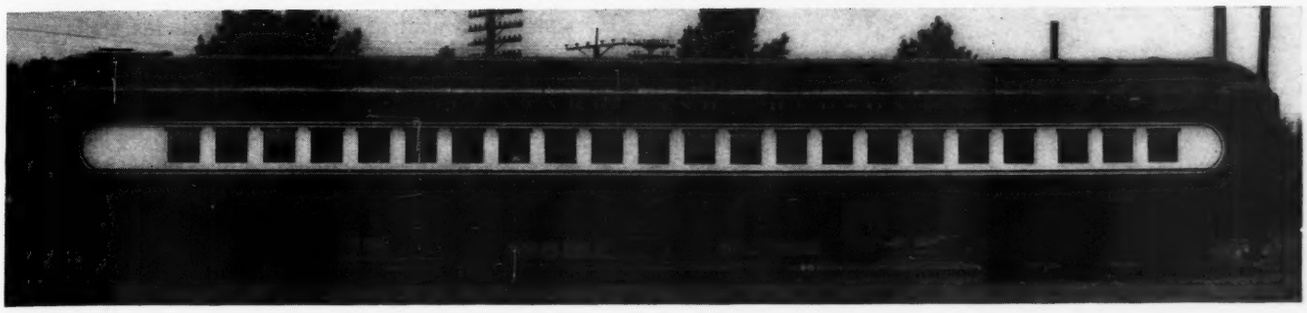
The improved situation in 1939 as compared with 1933 is reflected in the following figures:

	1939	1933
Freight revenue	11,999,587	9,684,156
Passenger revenue	1,426,085	1,308,192
Total operating revenue	15,336,250	12,218,448
Net railway operating income	1,022,073	207,297

The Officers

The officers to whom the destinies of the new company have been entrusted are thoroughly familiar with the property, the personnel and the problems to be encountered.

President Charles T. O'Neal was born in Brandywine Springs, Del., and received his early education in the Wilmington, Del., public schools and at Goldey college. He entered railway service in 1894 as a transportation clerk for the Lehigh Valley, and served that railway for 24 years in the capacities of clerk, accountant, statistician, trainmaster, superintendent, general superintendent, marine manager and assistant vice-president. In 1919 and 1920, Mr. O'Neal was furloughed to the United States Railroad Administration and was commissioned as a major in the U. S. Army. In 1921, he was elected vice-president of the Fort Smith & Western, at Fort Smith, Ark., and served in that capacity until 1929, when he was elected vice-president of the Buffalo, Rochester & Pittsburgh, with headquarters at Rochester, N. Y. Mr. O'Neal became president of the Chicago & Eastern Illinois on January 1, 1931, and president on the trustee's staff in September, 1933, in which capacity he was serving when elected president of the re-organized company on July 2, 1940.



One of Two D. & H. Coaches Recently Modernized with Air Conditioning, New Seats and Redecoration

Delaware & Hudson Reconditions Passenger Coaches

Interior appointments and decorations duplicate those of the new coaches purchased last year

LAST year the Delaware & Hudson placed in service six modern streamline air-conditioned passenger coaches, in the equipment and decoration of which careful attention was given to produce a high standard of comfort and attractiveness. These cars were built by the American Car and Foundry Company.*

In keeping with this policy of providing more comfortable and attractive accommodations for the traveling public the Delaware & Hudson initiated a program for modernizing two of its first-class conventional type all-steel passenger cars in the company shops at Colonie, N. Y. These cars, Nos. 222 and 223, will be assigned to main line trains operated on the Susquehanna division between Albany, N. Y., and Binghamton.

The color treatment and interior appointments of the new coaches purchased last year have met with such popular appeal that it was decided to follow the same standards in the reconditioned cars. The exterior appearance is also consistent with the new cars, the bodies of which were finished in a dark green with a soft gray panel accentuated with orange stripes to outline the outside window area.

Each car has a seating capacity of 70 persons. In the main passenger section there are 31 double rotating, adjustable, reclining seats upholstered in frieze. The cushions and arm rests are sponge rubber and the spring backs are filled with Sterling wool pads. Two stationary lateral seats upholstered in leather in the smoking compartment comfortably seat eight persons.

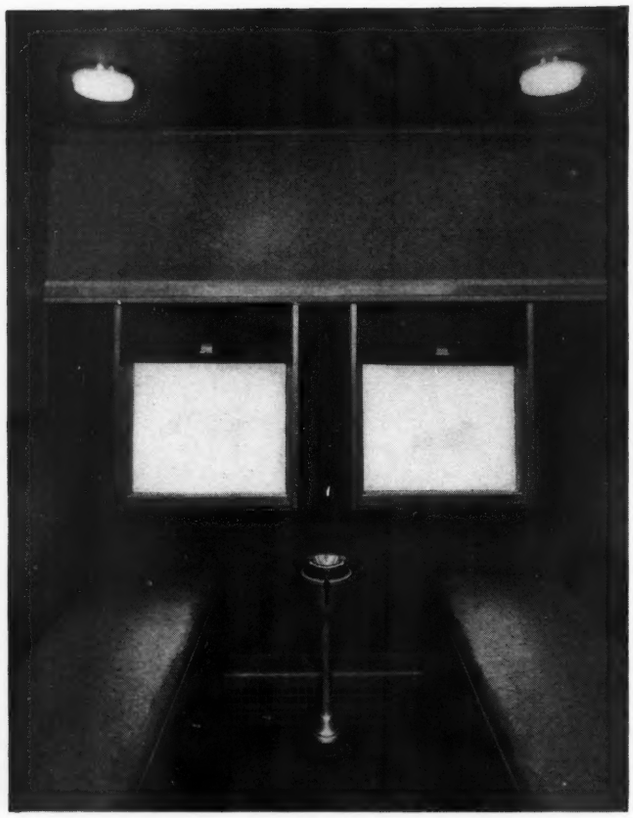
The air-conditioning apparatus is electro-mechanical of seven tons' capacity. An interesting feature is the provision made for draftless air circulation. This was achieved by sealing the Monitor sash openings with steel plates and converting the clere-story deck into an air chamber by means of the Pyle-National Multivent System which comprises perforated panels located at the ceiling of the car and running the full length of the main passenger section. As a consequence, air distribution is diffused uniformly throughout the car. Adequate provisions have been made for conditioning the air in the smoking compartment. Supplementing the air-conditioning system are four fans behind grilles which exhaust air to the atmosphere through ventilators. These fans, however, are operated in emergency only.

Illumination is furnished by 40-watt circular ceiling lights with prismatic lenses located over each seat. There is a six-watt blue light in each lighting unit for night service.

Power is supplied by a G. E. 20-kw. generator driven by a Safety V-belt-and-gear drive. The batteries are

The Interior of the Reconditioned Coaches Resembles that of the New Cars Installed in 1939

* For a complete description of these cars, see the *Railway Age* for November 25, 1939, page 812.



The Smoking Room Seats Eight Persons

the Edison 64-volt system. The floor heat comes from Vapor-Vulcan copper-bearing-steel fin radiation and temperatures are regulated by correlative control. All pipes are concealed behind steel grilles.

The original double sash windows were reframed and set in rubber to insure a tight installation. The cars were insulated in accordance with standard practices; sound-deadening material was applied to truck springs, pedestals, transom, spring plank, center plates, side bearings, coupler and buffer attachments.

Other features include large satin-finish aluminum basket racks running the length of car with a luggage compartment at one end of car for the baggage too bulky and heavy to be stored in the overhead basket racks.

The color treatment of the interior includes walls and pier panels in various tones and shades of green with the ceiling in sun tan, except the lighting panel which is an apple green. The floor covering is sand-colored jaspe linoleum with antique mahogany inlay. The frieze covering of several rows of front and rear seats is of mahogany color and the remaining seats are green in harmony with the general interior color scheme. The backs of all seats have beige-colored head rests. The seats in the smoking compartment are covered with red Pantasote. The curtains are faced with turquoise Loomcraft and the outside is gray Pantasote. All hardware and fixtures are chrome plate, satin finish. Marlite, a form of tile, is used for the cream-colored walls and blue wainscoting in the lavatories, the floors of which are covered with turquoise colored rubber.

* * *

The Test of Democracy's Effectiveness

"Both the necessity to rearm and the uncertainty as to trade challenge the efficiency and productivity of the democratic way of life. Both call for the utmost use of all the available technical competence, managerial skill, and labor resources that the country possesses. In none of these respects is the United States inferior to any other country, provided only that it is animated by the same unity and resolve, by co-operation in freeing the national energies that have been dissipated in the waste of the depression, and by willingness to work.

"The people who are viewing the prospect with almost hysterical alarm fail to remember that the problem of maintaining a standard of living against foreign competition has not risen overnight, but is as old as the industrial revolution. The real danger to this country is the failure to get the domestic situation in order; to resume capital investment, by which the productivity of labor is increased, costs reduced, and goods improved; and to understand that the American standard of living has not been created and cannot be guaranteed by legislative enactment, but is based upon the co-operation of research and engineering, management, capital and labor, to produce more goods at lower unit costs."

From the July Economic Bulletin of the National City Bank, N. Y.

* * * *

Train Connection Bus and Truck of the Texas & Pacific En Route to Mineral Wells, Texas

NEWS

Greyhound Can't Acquire Peninsula

Eastman dissent discusses monopoly and competition in transportation

Affirming the finding of its prior report the Interstate Commerce Commission, Division 5, has issued a report on further hearing, denying the application of Richmond Greyhound Lines, affiliate of the Richmond, Fredericksburg & Potomac, for authority to acquire the Peninsula Transit Corporation through purchase of capital stock for $320,000. The present decision—to which Chairman Eastman dissented—follows generally the proposed report of Examiner H. D. McCoy, which was reviewed in the *Railway Age* of January 20, page 185.

The adverse decision was based on a finding that the proposed acquisition "would not be consistent with the public interest" in that it would eliminate much of the bus competition from the territory served by Peninsula, which territory "roughly describes a triangle, bounded by Baltimore, Richmond and Norfolk." In its original decision, reviewed in the *Railway Age* of March 26, 1938, page 583, a unanimous Division 5 had based its adverse finding upon its interpretation of the Motor Carrier Act's section 213, which requires that when railroads or their affiliates are involved in acquisitions, there must be a showing that the proposed transaction will enable "such carrier other than a motor carrier to use service by motor vehicle to public advantage in its operations, and will not unduly restrain competition."

Evidence adduced at the further hearing revealed that subsequent to this original decision, the three R. F. & P. representatives on Richmond-Greyhound's board of seven directors have resigned their former positions as the latter's vice-president, assistant traffic manager, and auditor. These resignations along with the termination of arrangements for Richmond-Greyhounds use of R. F. & P. terminal facilities and its accounting and treasury departments, the present report says, make the railroad-affiliate phase of the case indistinguishable from that presented in Northland-Greyhound, Inc.,—Purchase—Liederbach, 25 M. C. C. 109. (See *Railway Age* of May 13, 1939, page 848). In other words all that Richmond-Greyhound had to prove at the further hearing was that the proposed purchase of Peninsula would be consistent with the public interest. This, in the opinion of Division 5's majority consisting of Commissioners Lee and Rogers, it failed to do—"because of the competitive factors" which were discussed at some length in the majority report.

Chairman Eastman was unable to agree; he subscribed to the applicant's contention that the latter's routes and those of Peninsula are "complementary" except between Richmond and Petersburg, where they operate over the same highway for 23 miles. Moreover, the I. C. C. chairman concluded that consummation of the purchase would confer upon the public "known and positive benefits in fares and service"; and that "the preponderance of public sentiment in the region served by vendor is clearly in favor of the purchase."

Continuing, the I. C. C. chairman converted much of the remainder of his dissenting opinion into an essay on monopoly and competition in the public utility and transportation fields, basing his views on observations extending over the past 35 years. Mr. Eastman said in part:

"Support of 'competition' against 'monopoly' and protection of the weak against the strong always strikes a popular chord, and the Greyhound system affords a good opportunity for the exploitation of such sentiments, because it is big, has grown very rapidly, and has certain railroad affiliations. Nevertheless, so far as I have been able to observe, it has a most excellent record of accomplishment in the reduction of fares and improvement of service, and its management has been unusually able and progressive. Certainly it ought not to be penalized because it has grown rapidly under such conditions.

"For the past 35 years I have been in a position to observe public utility and transportation conditions rather closely, and should have an informed judgment. Undoubtedly competition is a spur to enterprise, for much the same reason that 'necessity is the mother of invention,' but I have observed many companies where it did not produce that result, and on the other hand I have known many companies which had what was commonly thought of as a monopoly but were yet keenly and efficiently managed. My memory goes back, for example, to the time when there was much public sentiment in favor of competition in the telephone business, but I know of no reason to believe that the public interest has suffered because such competition has practically been eliminated. Nor has my observation led me to believe that size is any criterion of merit. The 'little fellows' and the 'big fellows' are both made up of good and bad.

"Public sentiment in this country has always cherished competition in transporta-

(*Continued on page 90*)

Urges New Type of RR Security

Dr. Stevens suggests an "income-participating" bond to meet present-day exigencies

Railroads are urged to do their financing by stock issues—yet regulation puts a "ceiling" on the rate of return which railroad investments can earn, a situation not conducive to stock issues which would be popular with investors. Such is the observation of Dr. W. H. S. Stevens, assistant director, Bureau of Statistics, I. C. C., in an article in the Georgetown Law Journal. Unregulated industries, he points out, can finance themselves successfully by stock issues because, in prosperous years, such companies may often earn two or three times as much as the "fair return" which is the maximum permitted to regulated utilities and railroads. Stockholders in these industries are thus compensated in good years for the risks they take of low earnings in poor years.

With such a "ceiling" on earnings and the further fact that stock cannot be sold at less than par in many jurisdictions, the regulated enterprise is forced to seek needed capital through bond issues. Such financing also has the added attraction that it gives "leverage" to stock issues. That is to say, bond issues *may* be sold at a rate of interest *less* than "fair return" and, if so, the earnings in fairly prosperous years *may* leave something over so that the return on capital stock *may* be greater than it would be if the company had no bonds. Issues of preferred stock do not serve this function as well as bonds, because, in the first place, they usually require a larger return than bonds do and, in the second place, income taxes have to be paid on earnings available for preferred stock, but not on those paid out for bond interest. Moreover, many investors prefer bonds to stocks. These incentives favoring bond over stock financing combine, in Dr. Stevens' opinion, to make it difficult for regulated enterprises to make easily a change from bond to stock financing.

The possibilities of "perpetual" debt, income bonds, "participating" bonds, combination fixed-and-contingent interest obligations are reviewed, with the author arriving at the conclusion that "probably the ideal combination is to drop the fixed interest feature entirely and combine income and participating features in the same obligation."

"Thus," Dr. Stevens goes on to say,

"the indenture would provide that the bondholders shall be entitled to interest to the extent earned in each year up to, say, 4 per cent and in addition to so much of 5 per cent of the earnings of each year after the payment of the said 4 per cent income interest as may be necessary to equal a rate of 4 per cent in each and every preceding year in which such rate of 4 per cent shall not have been paid. In this form of security there are no fixed interest claims to create financial difficulties because of the substitution of the income for fixed interest feature. Nor is any cumulative feature provided to protect income bondholders against the loss of interest in particular years arising from the failure of the corporation in any year to produce sufficient revenue to meet the income interest charges. Instead, these deficiencies are to be satisfied wholly or in part as the earnings may warrant out of the participations of subsequent years. . . .

"It may be argued that if priority of claim on the earnings and assets offers assurance of ability to pay interest, there is no particular reason why the obligation should not be fixed rather than a contingent or participating interest one; that in such a situation the only justification for the latter is to free the company from the obligatory charge when such fixed interest payments become difficult.

"Such a line of reasoning, however, ignores the possibilities of radical technological changes or long continued depressions or both combined, which, as in the case of the railroads, destroy earning power to an extent that cannot possibly be foreseen or estimated at the time the bonds are issued on the basis of any past experience or standards. Nearly all bonds of regulated companies are relatively long term, and both the short and longer term obligations are ordinarily refunded. It is difficult, not to say unreasonable, to expect wholesale reductions in the proportions of such obligations in the capital structure or to expect such companies to borrow on short term and actually liquidate instead of refunding their obligations. So long as this is true, the fixed interest obligation affords no possibility of protecting either the corporation or the bondholder against the forces of economic change. . . .

"In regulated companies stocks generally offer much less advantage financially to buyers than in unregulated companies. Bonds of regulated companies may be desirable from the standpoint of large bodies of investors because of the priorities of secured over unsecured obligations and of unsecured bonds over stock in event of financial difficulties. Also from the standpoint of many stockholders of such companies, they may be desirable at various times because of the leverage. For some time now, economic and technological changes have been subjecting earning power to increasingly greater fluctuations and uncertainties. These developments tend to render fixed interest debt more and more obsolete.

"In view of all these considerations, combination fixed and variable interest issues seem more logical than fixed interest issues, and variable interest issues more desirable than these combinations. Similarly, participating issues appear superior to income issues, and combination fixed and participating interest issues more logical than combination fixed and income interest issues. The combination income and participating interest issue is apparently the most logical of all."

Examiners Would Permit Stop-Offs

The Interstate Commerce Commission has made public the proposed report of Examiners R. N. Trezise and T. Leo Haden on those phases of the Freight Forwarding Investigation which relate to railroad practices of according stop-off arrangements on indirect routes and advancing charges of forwarding companies. Generally the examiners would permit the off-line stop-offs subject to circuitity limitations and sanction the collection by railroads and motor carriers of forwarder charges, provided appropriate tariffs are published.

With respect to the stop-off arrangements the proposed report makes the following recommended findings of fact and conclusions of law:

Recommended Major Findings of Fact

(1) That railroads serving points by indirect routes are in competition with railroads serving such points by direct routes.

(2) That stopping-in-transit arrangements to complete loading at points off the direct route between origin and destination

(a) Permits railroads serving points over indirect routes to compete with those that serve such points by direct routes.

(b) Enables the railroads to meet the competition of motor carriers and water lines.

(c) Affords railroads a means to aid industries on their lines which are in competition with industries at other locations in the same general territory.

(d) Places rail branch line points on parity with main line points.

(e) Enables a railroad to secure the long haul on traffic it originates.

(f) Permits smaller manufacturers and others to compete with larger ones by according them the privilege of partly loading a car at on point and complete loading at another point.

(g) Affords dealers and others in small cities to compete with those in larger communities in permitting deliveries to be split in such manner as to partly unload a car at one point and complete unloading at another point.

(3) That there are some instances where the distance over the indirect route through the off-line stop-off point exceeds the limitations usually imposed by the Commission in granting relief under the long-and-short-haul provision of section 4 of the act.

Recommended Conclusions of Law

It is recommended that the Commission find that the practice of respondent railroads in according stop-off arrangements at points on indirect routes without an additional charge for the out-of-line haul has not been shown to be unreasonable or otherwise unlawful except over routes longer than the following:

(a) Where the distance over the short line or route is 150 miles or less and the longer line or route is more than 70 per cent circuitous;

(b) Where the distance over the short line or route exceeds 150 miles but does not exceed 1,000 miles, and the longer line or route is more than 50 per cent circuitous, except that where the distance over the short line or route exceeds 150 miles the distance over the longer line or route does not exceed 255 miles, relief will apply to such longer line or route even though the said longer line or route is more than 50 per cent circuitous;

(c) Where the distance over the short line or route exceeds 1,000 miles and the longer line or route is more than 33⅓ per cent circuitous, except that where the distance over the short line or route exceeds 1,000 miles and the distance over the longer line or routes does not exceed 1,500 miles, it will be permissible to use such longer line or route even though the said longer line or route is more than 33⅓ per cent circuitous.

It is further recommended that the Commission should modify its findings in the original report to the extent indicated herein.

Should any of respondents conclude that unusual conditions justify continuing stop-off arrangements at points on indirect routes requiring a degree of circuity greater than herein found reasonable, without an additional charge for the out-of-route movement, they should by appropriate procedure seek authority for departure from the findings herein.

Recommendations in connection with the practice of advancing charges are as follows:

Recommended Major Findings of Fact

(1) That both rail and motor carriers advance forwarder charges on outbound billing, principally from break-bulk points.

(2) That there are two methods used by respondents in making settlement of amounts carried as advances with the forwarders; one is known as the net settlement plan wherein the carriers agent after collecting forwarder charges at destination deducts the charges of the carrier for transporting the shipment from the break-bulk point to destination and remits the balance to the forwarder; the other method is known as the gross settlement plan under which the full amount of the forwarder's charge to its customer is paid to the forwarder and the forwarder in turn makes a separate settlement with the carrier for its charges for transporting the shipment from the break-bulk point to destination. The net settlement plan is the most widely used.

(3) That the forwarder charges carried by the respondents are those which the forwarder makes against its customer, and is one applied against the shipment by the shipper, rather than one accruing on the shipment for a service incident to transportation.

(4) That the practice of respondents of advancing forwarder charges accords a service of value both to the consignee of the forwarder as well as to the forwarder itself, and is a convenience to the shipping public.

(5) That respondents have never lost any money as a result of the practices described.

Recommended Conclusions of Law

That the practice of respondents advancing to forwarders, who are shippers, charges which are not incident to the transportation of shipments found to be in violation of section 6 of the act.

That the practice of respondents making settlement with forwarders by off-setting the amount of freight charges due by sums of forwarder charges not already collected is equivalent to advancing forwarder charges in violation of section 6 of the act.

That the practice of respondents collecting forwarder charges from consignees, and paying them over to the forwarder after such collection, is not shown on this record to be unduly preferential of this class of traffic or unduly prejudicial against other classes of traffic, or otherwise in violation of the act, provided appropriate tariffs are published to authorize the practice.

That the conclusions in the original report should be modified to the extent indicated herein and appropriate tariffs either with or without a charge for the collection of forwarder charges should be filed by all of the carriers who desire to engage in this practice in order to conform to the provisions of section 6 of the act.

The Freight Forwarding Investigation, docketed as No. 27365, was the title case for this Trezise-Haden proposed report which embraced also I. & S. Docket No. 4696, Advancing Charges of Carloading Companies.

Nebraska Cuts Railroad Tax Valuations

Railroads operating in Nebraska have been allowed a 5.3 per cent cut in valuations by the state board of equalization and assessment for 1940, the assessment figures being set at $131,292,235, or a reduction of $7,418,690 from last year's total. The roads had asked for reductions running to as much as 40 per cent.

June Employment 4.2 Per Cent Above Last Year

Railroad employment increased another 2.2 per cent—from 1,012,483 to 1,035,079—during the one-month period from mid-May to mid-June, while the June total was 4.2 per cent above that for June, 1939, according to the Interstate Commerce Commission's compilation based on preliminary reports. The index number, based on the 1923-1925 average and corrected for sea-

sonal variation, stood at 56.7 in June, as compared with May's 56 and June, 1939's 54.4.

June employment in all groups was above that of May except among executives, officials and staff assistants (down 0.1 per cent) and train and engine service employees (down 0.3 per cent). The largest increase over the previous month was in the maintenance of way and structures group—up 6.8 per cent; next came transportation, other than train, engine and yard—up 2.9 per cent. Meanwhile employment in all groups was above that of June, 1939, the largest increases being the 7.6 per cent rise in the maintenance of equipment and stores group and the five per cent rise in the train and engine service group.

Senate Committee Reports Bill on Rail Debt Settlements

The Senate committee on interstate commerce has reported favorably, without amendment, the House-approved bill, H. R. 10014, which would amend the Transportation Act of 1920 to permit the Secretary of the Treasury to make compromise settlements of amounts due from railroads on loans made under section 210 of that act.

Bill to Give I. C. C. Control Over Hours of All Motor Employees

Representative Eberharter, Democrat of Pennsylvania, has introduced H. R. 10180 to amend the Motor Carrier Act to give the Interstate Commerce Commission jurisdiction over the maximum hours of service of all motor carrier employees. The Supreme Court recently upheld the commission in its finding that the present law gives it jurisdiction only over those employees whose activities affect safety of operations.

Bill for Mail Service by Motor Vehicles Goes to President

The House on July 2 accepted the Senate amendment to H. R. 6424, thereby completing legislative action and sending to the President that bill which would authorize the Postmaster General to contract with motor carriers for carrying mail and postal clerks. The aforementioned Senate amendment limits the Postmaster General's authority to situations where "it is found that adequate railroad facilities are not available."

Truck-Competitive Rates on Meats and Packing House Products

The Interstate Commerce Commission has reopened for further consideration the I. & S. No. 4650 proceeding involving rates on meat and packing house products from Chicago to a portion of Central Freight Association Territory. The railroads are proposing reduced rates to meet motor truck competition, principally that of contract carriers.

As noted in the *Railway Age* of March 30, page 600, where the commission's original report by Commissioner Alldredge was reviewed, the suspended schedules, found unduly prejudicial and otherwise in violation of the Interstate Commerce Act, were ordered canceled—without prejudice to the filing of reduced-rate tariffs without such disabilities. Along with the order reopening the case came another report on further consideration by Commissioner Alldredge; it eliminates the findings of undue prejudice to certain Wisconsin, Iowa and Minnesota points.

President Signs Unemployment Act Amendment

President Roosevelt has approved that amendment to the Railroad Unemployment Insurance Act which gives Kentucky and other similarly situated states two years to work out arrangements for the transfer to the Railroad Unemployment Insurance Fund of the taxes collected from railroad employees under the Social Security Act. The bill carrying the amendment was H. R. 10009 which passed the House on June 11 and the Senate on June 22; the occasion for the legislation arose when the Kentucky courts held unconstitutional a statute which undertook to authorize the transfer of the funds.

N. Y. S. & W. Reduces Connecting Bus Fare

The fare for the trip by motorbus connection between Susquehanna Transfer in New Jersey and Times Square in New York was reduced from 15 cents to 10 cents each way on July 1.

Eleven months ago, the New York, Susquehanna & Western inaugurated this "intercepting" bus service in connection with certain commuter trains in the New York area, for the benefit of passengers destined to uptown New York. The number of those using this service has steadily increased and, with the inauguration this month of all-day service in the commuting zone with the new streamlined rail motorcars, a further increase in this traffic is expected.

The lower bus fare is attributed to the growing patronage of the buses, making a reduction in the per-passenger cost of the service.

Express Agency Still Trying to Get Status Case Reopened

Asserting among other things that its transport assignments in connection with the national defense program will be such that its operations as a whole should have a measure of flexibility not possible if some are regulated under Part I of the Interstate Commerce Act while others are under the Motor Carrier Act, the Railway Express Agency has filed with the Interstate Commerce Commission a new petition asking for reargument before and reconsideration by the entire commission of Division 5's decision in the No. MC-66562 proceeding involving R. E. A.'s status. The Express Agency's request is supported in another petition filed by the Brotherhood of Railway Clerks.

As noted in the *Railway Age* of May 25, page 952, the commission recently denied a previous petition of R. E. A. The present request asserts that since that action of the commission, conditions have so changed as to warrant the commission reversing Division 5's decision which was reviewed in the *Railway Age* of January 13, page 137. Among the changed conditions cited are the increase in airplane construction and other phases of the defense program which require speedy transportation in which the Express Agency will play an important role.

Establish St-Louis-Twin Cities Rocket-Zephyr Service

Overnight streamlined train service between St. Louis and St. Paul-Minneapolis, Minn., via the Chicago, Burlington & Quincy and the Chicago, Rock Island & Pacific will be inaugurated late this fall. Two luxurious Diesel-powered, stainless steel trains, one a Rocket and the other a Zephyr, are being purchased for the service, which will operate over the Burlington between St. Louis, Mo., and Burlington, Iowa, and over the Rock Island between Burlington and the Twin Cities.

The tentative schedule for the Rocket-Zephyr service calls for a 5:30 p. m. departure from St. Louis with arrival at St. Paul at 7:00 a. m. and Minneapolis at 7:30 p. m. Southbound, the departure from Minneapolis will be at 5:00 p. m. and from St. Paul at 5:30 p. m., with a 7:00 a. m. arrival at St. Louis. The proposed new schedule of 14 hours in both directions compares with the present 17½-hr. schedule of the northbound Twin City Limited and the 19¾-hr. schedule of the southbound St. Louis Limited, a reduction of 3½ hr. northbound and 5¾ hr. southbound.

Each train will be drawn by a 2000-hp. Diesel-electric locomotive of latest design and, in addition to baggage and express cars, will consist of a chair car, a standard Pullman, and a dining-observation-lounge car.

Proposed General Revision of Rules for Transportation of Explosives

The proposed general revision of regulations for the transportation of explosives and other dangerous articles, which has been submitted by the Bureau of Explosives, Association of American Railroads, will be considered by the Interstate Commerce Commission at Washington, D. C., conferences with interested parties on August 5, 6 and 7, and at a public hearing there on August 8. The hearing will be held before Commissioner J. Monroe Johnson and Assistant Director H. C. King of the Bureau of Service.

Along with I. C. C. Secretary W. P. Bartel's notice announcing the conferences and hearing, the commission made public "Proof No. 4" of the proposed revision prepared by the A. A. R. Bureau and dated June, 1940. This is a document of 168 two-column pages, covering in turn general information, commodity list, regulations applying to shippers, regulations applying to carriers by rail freight, regulations applying to carriers by rail express, regulations applying to rail carriers in baggage service, and regulations applying to common carriers by public highway subject to Part I of the Interstate Commerce Act.

Secretary Bartel's announcement noted how the commission is authorized by the Transportation of Explosives Act to utilize the services of the A. A. R. Bureau of

Explosives; he added that the aforementioned "Proof No. 4" had been drafted by that Bureau "at our request." Next, he called attention to other documents bearing on the proceeding which were also made public by the commission. These included "Addendum A of Proposed Requirements," a table showing the disposition of paragraphs contained in the present regulations; and the proposed A. A. R. fusion-welded tank car specifications.

Chicago Rail Fans Take Week-End Trip in Iowa

Seventy-five members of the Railroad Club of Chicago, and the Central Electric Railfans Association of Chicago, will spend the weekend of July 13-14 visiting the railway terminals in Des Moines, Iowa. The group will leave the La Salle Street station at Chicago at 11:30 p. m., standard time, on Friday, July 12, on the Colorado Express of the Rock Island, and will be taken on Saturday, July 13, on a "mixed" train to Indianola and Winterset, Iowa. On Sunday, July 14, the party will devote time to visiting the railroads in Des Moines, returning to Chicago late that evening.

Freight Car Loading

Revenue freight car loading for the week ended July 6, which included the Fourth-of-July holiday, totaled 636,901 cars, the Association of American Railroads announced on July 11. This was a decrease of 115,425 cars, or 15.3 per cent, below the preceding week, but an increase of 81,749 cars, or 14.7 per cent, above the corresponding week last year and an increase of 153,920 cars, or 27.1 per cent, above the comparable 1938 week.

Loadings of revenue freight for the week ended June 29 totaled 752,326 cars. This was an increase of 24,230 cars, or 3.3 per cent, above the preceding week, an increase of 90,922 cars, or 13.7 per cent, above the corresponding week in 1939, and an increase of 163,446 cars, or 27.8 per cent, above the same week in 1938.

The summary as compiled by the Car Service Division, A. A. R., follows:

Revenue Freight Car Loadings

For Week Ended Saturday, June 29			
Districts	1940	1939	1938
Eastern	154,627	136,333	122,399
Allegheny	155,730	124,860	103,525
Pocahontas	49,995	45,614	38,494
Southern	101,614	92,836	86,134
Northwestern	123,312	102,988	83,677
Central Western	115,543	111,063	105,482
Southwestern	51,505	47,710	49,169
Total Western Districts	290,360	261,761	238,328
Total All Roads	752,326	661,404	588,880
Commodities			
Grain and grain products	44,778	51,491	50,953
Live stock	11,041	10,415	9,682
Coal	123,540	104,670	93,508
Coke	10,816	6,104	4,110
Forest products	35,884	33,010	27,795
Ore	67,438	44,102	24,623
Merchandise l.c.l	149,432	153,457	146,941
Miscellaneous	309,397	258,155	231,268
June 29	752,326	661,404	588,880
June 22	728,096	638,534	558,788
June 15	712,445	633,955	555,519
June 8	702,571	630,060	553,854
June 1	639,126	563,309	502,617
Cumulative Total, 26 Weeks	16,906,395	15,263,800	14,230,632

In Canada.—Carloadings for the week ended June 29 totaled 56,796, as compared with 59,400 in the previous week and 40,783 a year ago, according to the summary of the Dominion Bureau of Statistics.

	Total Cars Loaded	Total Cars Rec'd from Connections
Total for Canada:		
June 29, 1940	56,796	25,990
June 22, 1940	59,400	25,840
June 15, 1940	56,876	24,973
July 1, 1939	40,783	19,195
Cumulative Totals for Canada:		
June 29, 1940	1,299,933	642,416
July 1, 1939	1,110,952	541,483
July 2, 1938	1,139,917	541,967

President Names Emergency Board on Express Agency Strike Threat

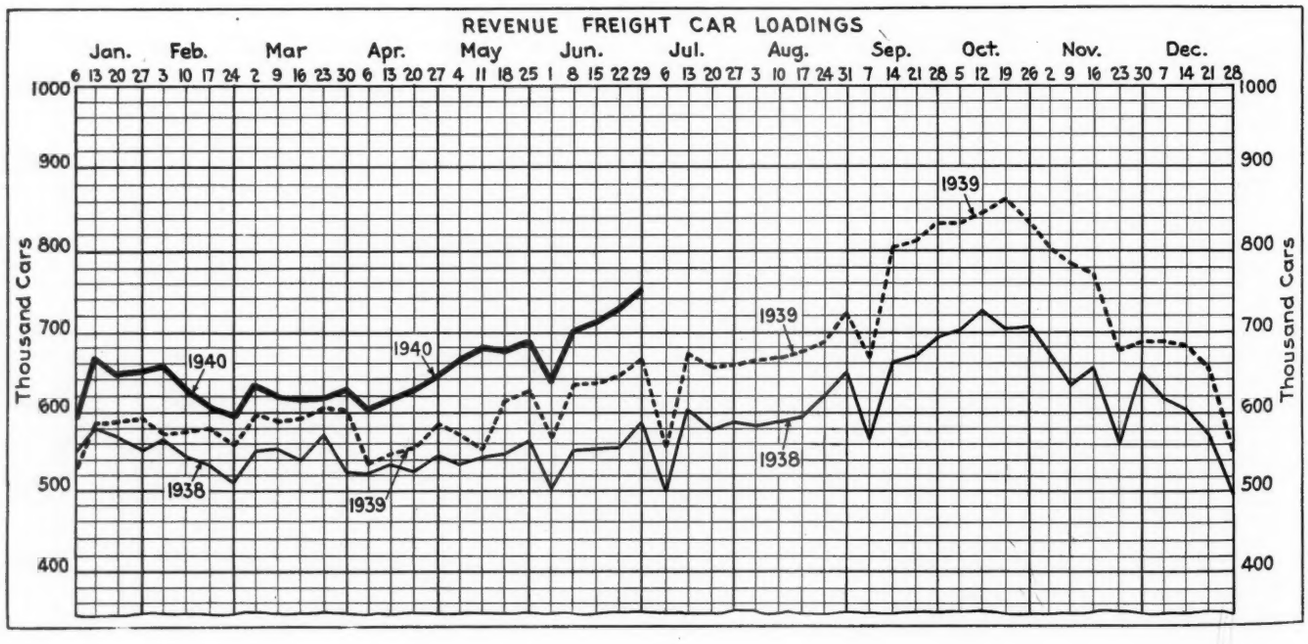
Exercising his powers under the Railway Labor Act, President Roosevelt on July 10 issued a proclamation creating an emergency board to investigate an hours-of-work dispute between the Railway Express Agency and its employees represented by the Brotherhood of Railway and Steamship Clerks, Freight Handlers, Express and Station Employees, which dispute had culminated in a decision of the employees to strike at 5 a.m. on July 12. The time of the strike had been announced a short while before the Presidential proclamation was issued by George M. Harrison, president of the Brotherhood, who was in Washington.

As explained by Mr. Harrison the issue is one of alleged discrimination by R. E. A. against the 30,000 of its employees who are members of the clerks' organization. He stated that on March 1, the Express Agency granted a 44-hour week to 5,000 of its employees who are members of the International Brotherhood of Teamsters; but it has refused to do the same for members of the B. of R. C., who work 48 hours a week.

President Roosevelt's proclamation, in the usual form, "whereases" that the President has been duly notified by the National Mediation Board that the dispute "threatens substantially to interrupt interstate commerce to a degree such as to deprive the country of essential transportation service." It goes on to create a three-member board to investigate the dispute and report its findings within 30 days. Members of the board were not named by the President at the time the proclamation was issued.

Gurney Continues Fight on Unemployment Amendments

Senator Gurney, Republican of South Dakota, has served notice on the Senate that he will attempt to have his bill, S. 3925, which represents the carriers' views on the liberalization of unemployment insurance benefit payments, substituted for S. 3920, the bill sponsored by organized railway labor and supported by Murray W. Latimer, chairman of the Railroad Retirement Board. His intention to override the bill which has been favorably reported by the Senate interstate commerce committee became known when he offered in



the Senate on July 8 a proposed substitute for S. 3920, in the form of an amendment which would strike out the committee's bill and substitute his.

Senator Gurney's amendment, which represents the views of the A. A. R., would liberalize benefits under the Railroad Unemployment Insurance Act and would establish a merit rating basis for the railroads so that the three per cent tax now paid by the carriers could be reduced if their employment record remains as satisfactory as it has been during the past few years. The committee bill, which was introduced by Senator Wagner, Democrat of New York, would increase benefit payments by at least 100 per cent, but would not reduce the three per cent tax which is now being paid by the carriers.

Meanwhile, the House interstate and foreign commerce committee concluded hearings on July 9 on H. R. 9706, a companion measure to Senator Wagner's, which was offered by Representative Crosser, Democrat of Ohio; and on H. R. 10082 introduced by Representative Reese, Republican of Tennessee, as a companion measure to the Gurney bill. The same witnesses for the railroad labor unions, the Railroad Retirement Board, and the carriers, who offered testimony before the Senate committee on S. 3920, details of which were given in the *Railway Age* of May 18, page 870, also testified before the House committee, and their testimony followed the same general lines as that before the other committee.

Betts Calls for Speedy Return of Box Car

Outlining traffic conditions which have produced "a tightening up of the box car supply," L. M. Betts, manager of the Car Service Division's Closed Car Section, on July 6 addressed a circular to all railroads, emphasizing the necessity for action "to insure the utmost efficiency in the handling of the available cars, and particularly the prompt return of cars to owners rails, loaded or empty."

"The Southwestern winter wheat crop harvest," Mr. Betts said, "is in full swing after being delayed in Oklahoma and Texas by heavy rains at the time movement to market ordinarily would begin. As a result, the entire territory Texas to Kansas came in at once and the demand for cars has been so great that some situations could not be taken care of promptly, and sporadic difficulties have occurred. Temporarily the situation has eased, but Nebraska is coming in and with several thousand cars at terminal markets the grain loading roads are in need of all possible assistance in way of prompt return of their cars and compliance with any orders they may place.

"Harvesting also is under way in the territory North of the Ohio river, and Eastern lines serving this district require exactly the same sort of cooperation from their connections.

"Heavy increase in traffic is being experienced by the Pacific Coast railroads, both in California and the Puget Sound district. This is due both to better business and to extensive diversion of traffic from water to rail, both local and transcontinental. Because such a large proportion of the loading from this territory is transcontinental, roads serving this area are particularly dependent upon the prompt return of their box car equipment from Mid-West, Eastern and Southern territories. Much of this business must have high 40 ft. and 50 ft. cars and particular complaint is registered about the slow return of these cars. . . ."

May Accident Statistics

The Interstate Commerce Commission on July 10 made public its Bureau of Statistics' preliminary summary of steam railway accidents for May and this year's first five months. The tabulation, which is subject to revision, follows:

Item	Month of May		5 months ended with May	
	1940	1939	1940	1939
Number of train accidents	483	410	2,931	2,328
Number of casualties in train, train-service and nontrain accidents:				
Trespassers:				
Killed	199	205	699	791
Injured	174	225	659	858
Passengers on trains:				
(a) In train accidents*				
Killed	—	1	26	1
Injured	218	48	511	129
(b) In train-service accidents				
Killed	—	3	1	4
Injured	122	118	645	637
Travelers not on trains:				
Killed	—	—	3	3
Injured	61	68	374	342
Employees on duty:				
Killed	34	37	213	202
Injured	1,245	1,342	7,185	6,494
All other nontrespassers:**				
Killed	130	111	840	627
Injured	370	309	2,637	2,186
Total—All classes of persons:				
Killed	363	357	1,782	1,628
Injured	2,190	2,110	12,011	10,646

* Train accidents (mostly collisions and derailments) are distinguished from train-service accidents by the fact that the former cause damage of more than $150 to railway property.

** Casualties to "Other nontrespassers" happen chiefly at highway grade crossings. Total highway grade-crossing casualties *for all classes of persons, including both trespassers and nontrespassers,* were as follows:

Persons:				
Killed	119	104	772	578
Injured	247	244	1,967	1,622

Superhighways for National Defense and Other Things

Senator Downey, Democrat of California, has introduced S. 4195 to authorize the President to provide for the construction "of an integrated system of super-safety highways throughout the United States, together with such air fields and military bases as he may deem advisable." As the latter indicates, Senator Downey's proposal has the now familiar "national defense" angle; but it is also designed to "improve the instrumentalities of interstate commerce, promote the public safety, stimulate business recovery . . . develop outlets for our national savings, increase the public revenues, and eliminate unemployment."

The bill provides that the highway system should include at least three transcontinental highways, and at least three north-and-south highways. Construction would be under the direction of the Secretary of War and the Chief of Engineers of the Army, and the amount of work undertaken during each of the 10 fiscal years beginning with fiscal 1941 "shall be determined by the President with a view to restoring full employment to the people of the United States at the earliest practicable date." The Reconstruction Finance Corporation would be authorized and directed to make available to the Secretary of War such sums as the President might from time to time request. Finally, the President would be authorized to cooperate with the governments of Mexico and other countries in North America "to provide for the construction of such highways . . . as will aid in the defense of the Panama Canal and North America."

Rights of Motor Carrier Employees Are Defined

All employees of common and contract motor carriers engaged in interstate or foreign commerce, except those drivers over whom the Interstate Commerce Commission has taken jurisdiction, are entitled to both the minimum wage and maximum hour benefits of the Fair Labor Standards Act, Col. Philip B. Fleming, Administrator of the Wage and Hour Division, U. S. Department of Labor, declared on July 8 in commenting on a recently issued revision of Interpretative Bulletin No. 9.

Dealing with the exemption of certain employees of motor carriers from the maximum hour provisions of the Act under Section 13(b) (1), the revised bulletin cites the recent ruling of the United States Supreme Court in the case of the United States, et al. v. The American Trucking Associations, Inc. That decision sustained the position of the commission and the Wage and Hour Division that the commission is limited in fixing maximum hours to only those employees of common and contract motor carriers whose activities affect the safety of operation. It is pointed out in the bulletin that up until now, the commission has put only drivers in the category of those employees affecting the safety of operation.

Thus, it is stated, all other employees of common and contract motor carriers engaged in interstate or foreign commerce are entitled to 30 cents an hour and time and one-half after 42 hours. The exempt drivers, while they are not entitled to overtime compensation, must nevertheless be paid the minimum of 30 cents an hour.

Drivers of private carriers engaged in interstate or foreign commerce will be exempt from the maximum hour provisions of the Fair Labor Standards Act starting August 1, 1940, when I. C. C. regulations governing their maximum hours of service become effective, it is stated. As in the case of drivers for common and contract carriers, they are entitled to the minimum wage of 30 cents an hour.

The revised bulletin asserts that since the commission expressly declined to take jurisdiction over drivers employed by wholesalers operating wholly within the state, drivers employed by such wholesalers do not come within the exemption. Attention is called to the fact that the exemption becomes operative in any work-week in which the drivers for such wholesalers en-

gage in any transportation over which the commission has asserted jurisdiction, such as transportation across state lines.

The revised bulletin lists the following as not being within the exemption:

Drivers transporting goods in and about a plant producing goods for commerce, chauffeurs or drivers of company cars or busses transporting officers or employees in the course of their employment in an establishment producing goods for interstate commerce, drivers who transport goods from a producer's plant to the plant of a processor who sells goods in interstate commerce, and drivers who transport goods from a factory to the plant of an independent contractor who performs operations on the goods and returns them by truck to the factory which further processes such goods.

Greyhound Can't Acquire Peninsula

(*Continued from page 85*)

tion, and still does. The fact is, however, that such competition is now more prevalent than ever before. It exists on every hand and one of the main problems of public regulation is to prevent it from becoming unduly wasteful and destructive. Even if there were only one bus company, it would have plenty of competition, for the private automobile is, by all accounts, the most important competitive factor in bus transportation, to say nothing of the railroads.

"However, I would not like to see the Greyhound system absorb all the bus transportation of the country, or even become the only large and strong system. One danger which any large company faces, regardless of competition, is that when the men of genius who made it large and successful pass on, they may be succeeded, particularly if the principle of seniority prevails, by men of inferior calibre. This danger is mitigated, so far as an entire industry is concerned, if all of the eggs are not in one basket. From its own point of view, moreover, conditions will be healthier for the Greyhound system, especially in its relations with the public, if it has strong rivals. On the other hand, I am persuaded that duplicate operations of competing bus lines over the same highway are not generally desirable. * * *"

Canada-U.S.-Canada Sightseeing Buses Subject to Motor Act

Round-trip sightseeing bus services from Canada into the United States are operations in foreign commerce and thus subject to the Motor Carrier Act insofar as they are conducted within the boundaries of the United States. The Interstate Commerce Commission, Division 5, has thus held in a recent decision granting applications of two Toronto, Ont., operators.

In the title case (MC-95869) the commission granted a common-carrier certificate for the sightseeing services to George Thomas Cripps of Toronto, doing business as Scenic Motor Coach Tours, authorizing operations beginning and ending at Toronto, or points in Canada adjacent thereto, and extending to all points in Michigan, New York, New Jersey, Maryland, Pennsylvania, Virginia and the District of Columbia. The report also embraced MC-88457, and the applicant therein—Horace John Neath of Toronto, doing business as West York Bus Lines—got a similar certificate for the operation of round-trip sightseeing tours from Toronto to Detroit, Mich., Niagara Falls, N. Y., and Buffalo.

Leading up to its finding that the operations, to the extent that they are conducted in the United States, are subject to its jurisdiction, the commission had this to say: "Although the proposed tours will begin and end in Canada and passengers will return to Canada, we do not believe that these facts in any wise alter the foreign character of this traffic. It is essentially the transportation of passengers from points in Canada to points in the United States for the purpose of pleasure or sightseeing and then return to Canada. The fact that only round trips are made is not important."

The report noted that the applications were opposed by certain rail and motor carriers; but in another place said that "the fact that the proposed operations compete to some extent with existing operations is not alone controlling." Previously the commission had suggested that increased travel in this country is "desirable and has many public benefits."

Would Make Truck Rates on Granite Higher Than Rail

Prescription of truck rates differentially higher than rail rates on granite has been recommended to the Interstate Commerce Commission by Examiner Burton Fuller in a proposed report on the commission's general investigation into the lawfulness of the rates, charges, rules, regulations, and practices on granite and marble by rail, truck and water from origins in Vermont to destinations in New England and Trunk Line territories. With respect to the rate on marble, the examiner recommended a finding that the charges by rail and motor vehicle had not been shown to be unreasonable or otherwise unlawful; while he would discontinue the water-rate phase of the proceeding, because no evidence was adduced as to the traffic by water.

The proceeding is docketed as No. 28286, and Examiner Fuller's recommended finding as to the rates on granite is set forth in the proposed report as follows: "The commission should find that the carload rates on polished and carved granite are, and for the future will be unreasonably high, to the extent they exceed or may exceed column 27.5, minimum 36,000 lb.; and that the less-than-carload rates on granite are unreasonably low, to the extent they are or may be less than column 45 where destination delivery is included, with rates seven cents lower where they are station rates, that is, destination delivery is not included; and that the rates on granite by common carrier by motor vehicle, in quantities of less than 10,000 lb., are, and for the future will be unreasonably low to the extent that they reflect differentials of less than five and 12 cents over the less-than-carload destination delivery and station rates, respectively, with rates by truck in quantities of 10,000 lb. and over made five cents under the rates by truck for lesser quantities."

The general investigation by the commission was the outgrowth of maneuvers whereby the railroads sought to preserve differentials like those recommended by the examiner and the truck lines sought to narrow them. Among other statements in the proposed report was one to the effect that "on granite, as compared with rail service, the trucks render a service more costly to the carrier and of greater value to the shippers and consignees." Leading up to his recommended finding, Examiner Fuller asserted that "the rates on granite are clearly in need of adjustment," because the l. c. l. rates "have been unecessarily reduced by destructive competitive forces."

"While rates should not be prescribed for the sole purpose of apportioning traffic between the two forms of transportation," the proposed report goes on, "they should be adjusted so as to give each form an equal opportunity to compete for the traffic, all things considered. Such rates should not be equalized where the services are different, but should be fixed with due regard to the relative cost and value thereof."

Montreal Terminal Work Not to Be Stopped

The new terminal in Montreal of the Canadian National will be completed, Transport Minister C. D. Howe told the House at Ottawa last week during the Budget debate. The project, he said, will be rushed to completion so that operation of the new terminal can commence next spring, and the finishing touches on the work can be given a year from this fall.

Mr. Howe at the outset said Conservative leader R. B. Hanson's remark that continuance of work on the terminal was "shocking" showed "a complete lack of conception of what the terminal project means." The Transport Minister pointed out that up to the commencement of the new project the Canadian National had four separate terminals in Montreal, none of them connected with the other. One was Bonaventure, a second was the Moreau street station, then the Tunnel terminal and, fourth, the McGill Street terminal of the Montreal and Southern Counties line.

It was necessary, said Mr. Howe, to unify these terminals and provide enlarged facilities for handling the increased freight and passenger traffic. At the outset it was to be a $53,000,000 terminal but the drop in business after 1929 brought about a stoppage of work and after $16,800,000 had been spent on the new scheme. During the last 18 months came definite indications of a steady rise in traffic for the railway, and the problem in Montreal promised to again become acute.

Then it was decided, the Minister stated, to resume work on the project but it would be a largely modified scheme, and it was also decided to spend on this an additional $12,500,000. Both the management of the railway and the government, he said, agreed this would be money well spent. Last year about $4,500,000 was expended. When war broke out the situation was again carefully reviewed. Attention was given to

the question on how much the $12,500,000 could be reduced and at the same time produce the desired result.

It was decided, Mr. Howe said, that this figure of $12,500,000 could be cut by $2,000,000 and still preserve the terminal's main features. "Had the terminal not been continued to completion," Mr. Howe told the House, "there would have been left an unproductive expenditure amounting to about $23,000,000, but by adding to this outlay a maximum of $4,000,000 the terminal can be completed and made of service to the railway and the city."

Barge Line Seeks I. C. C. Authority

The Rivers Terminal Corporation has applied to the Interstate Commerce Commission for authority to operate as a common carrier by water and for authority to utilize joint rates and through routes with rail carriers in accordance with section 3 (e) of the Inland Waterways Corporation Act. The petition points out that the company will operate on the Mississippi, Red, Black, and Ouachita rivers and the Intracoastal Canal, with terminal ports at New Orleans, La., on the Mississippi; West Monroe, La., on the Ouachita; Camden, Ark., on the Ouachita; and Franklin, La., on the Intracoastal Canal.

Meetings and Conventions

The following list gives names of secretaries, dates of next or regular meetings and places of meetings:

AIR BRAKE ASSOCIATION.—R. P. Ives, 350 Fifth Ave., New York, N. Y.

ALLIED RAILWAY SUPPLY ASSOCIATION.—J. F. Gettrust, P. O. Box 5522, Chicago, Ill. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

AMERICAN ASSOCIATION OF FREIGHT TRAFFIC OFFICERS.—W. R. Curtis, F. T. R. M. & O. R. R., 327 S. La Salle St., Chicago, Ill.

AMERICAN ASSOCIATION OF GENERAL BAGGAGE AGENTS.—E. P. Soebbing, 1431 Railway Exchange Bldg., St. Louis, Mo. Annual meeting, October 22-24, 1940, Hollywood Beach, Fla.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS.—B. D. Branch, C. R. R. of N. J., 143 Liberty St., New York, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—F. O. Whiteman, Union Station, St. Louis, Mo.

AMERICAN ASSOCIATION OF RAILWAY ADVERTISING AGENTS.—E. A. Abbott, Poole Bros., Inc., 85 W. Harrison St., Chicago, Ill.

AMERICAN ASSOCIATION OF SUPERINTENDENTS OF DINING CARS.—F. R. Borger, C., I. & L. Ry., 836 S. Federal St., Chicago, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—A. E. Bechtelheimer, (President), C. & N. W. Ry., 400 W. Madison St., Chicago, Ill. Annual meeting, October 15-17, 1940, Hotel Stevens, Chicago, Ill.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION.—E. G. Reed, Union Pacific R. R., 1416 Dodge St., Omaha, Neb.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, March 11-13, 1941, Palmer House, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS' ASSOCIATION.—M. W. Jones, Baltimore & Ohio R. R., 1105 B. & O. R. R. Bldg., Baltimore, Md.

AMERICAN RAILWAY TOOL FOREMEN'S ASSOCIATION.—G. G. Macina, C., M., St. P. & P. R. R., 11402 Calumet Ave., Chicago, Ill.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—J. H. Huntt, Tower Bldg., Washington, D. C. Annual meeting, November 11-12, 1940, Chicago, Ill.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. E. Davies, 29 W. 39 St., New York, N. Y.
Fall meeting, September 3-5, 1940, Davenport Hotel, Spokane, Wash.
Annual meeting, December 2-6, 1940, New York, N. Y.
Railroad Division—C. L. Combes, *Railway Age*, 30 Church St., New York, N. Y.

AMERICAN TRANSIT ASSOCIATION.—Guy C. Hecker, 292 Madison Ave., New York, N. Y. Annual meeting, September 23-26, 1940, The Greenbrier, White Sulphur Springs, W. Va.

AMERICAN WOOD PRESERVERS ASSOCIATION.—H. L. Dawson, 1427 Eye St., N. W., Washington, D. C. Annual meeting, February 4-6, 1941, Brown Hotel, Louisville, Ky.

ASSOCIATION OF AMERICAN RAILROADS.—H. J. Forster, Transportation Bldg., Washington, D. C.
Operations and Maintenance Department.—Charles H. Buford, Vice-President, Transportation Bldg., Washington, D. C.
Operating-Transportation Division. — L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
Operating Section—J. C. Caviston, 30 Vesey St., New York, N. Y.
Transportation Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
Fire Protection and Insurance Section.—W. F. Steffens, New York Central, Room 3317, 230 Park Avenue, New York, N. Y. Annual meeting, October 15-16, 1940, Chicago, Ill.
Freight Station Section.—L. R. Knott, 59 E. Van Buren St., Chicago, Ill.
Medical and Surgical Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
Protective Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
Safety Section.—J. C. Caviston, 30 Vesey St., New York, N. Y.
Telegraph and Telephone Section. — W. A. Fairbanks, 30 Vesey St., New York, N. Y. Annual meeting, September 10-12, 1940, Chateau Laurier, Ottawa, Ontario, Canada.
Engineering Division.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, March 11-13, 1941, Palmer House, Chicago, Ill.
Construction and Maintenance Section.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, March 11-13, 1941, Palmer House, Chicago, Ill.
Electrical Section.—W. S. Lacher, 59 E. Van Buren St., Chicago, Ill. Annual meeting, October 29, 1940, Hotel Sherman, Chicago, Ill.
Signal Section.—R. H. C. Balliet, 30 Vesey St., New York, N. Y. Annual meeting, October 8-10, 1940, Wardman Park Hotel, Washington, D. C.
Mechanical Division.—V. R. Hawthorne, 59 E. Van Buren St., Chicago, Ill.
Electrical Section.—J. A. Andreucetti, 59 E. Van Buren St., Chicago, Ill. Annual meeting, October 30, 1940, Hotel Sherman, Chicago, Ill.
Purchases and Stores Division.—W. J. Farrell 30 Vesey St. New York, N. Y.
Freight Claim Division.—Lewis Pilcher, 59 E. Van Buren St., Chicago, Ill.
Motor Transport Division.—George M. Campbell, Transportation Bldg., Washington, D. C.
Car-Service Division.—E. W. Coughlin, Transportation Bldg., Washington, D. C.
Finance, Accounting, Taxation and Valuation Department.—E. H. Bunnell, Vice-President, Transportation Bldg., Washington, D. C.
Accounting Division. — E. R. Ford, Transportation Bldg., Washington, D. C. Annual meeting, 1941, Denver, Colo.
Treasury Division.—E. R. Ford, Transportation Bldg., Washington, D. C. Annual meeting, October 10-11, 1940, Roanoke, Va.
Traffic Department. — A. F. Cleveland, Vice-President, Transportation Bldg., Washington, D. C.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Claim Agent, Alton R. R., 340 W. Harrison St., Chicago, Ill. Annual meeting, 1941, Denver, Colo.

BRIDGE AND BUILDING SUPPLY MEN'S ASSOCIATION.—W. S. Carlisle, National Lead Company, 900 W. 18th St., Chicago, Ill. Meets with American Railway Bridge and Building Association.

CANADIAN RAILWAY CLUB.—C. R. Crook, 4415 Marcil Ave., N. D. G., Montreal, Que. Regular meetings, second Monday of each month except June, July and August, Windsor Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS, MO.—J. J. Sheehan, 1101 Missouri Pacific Bldg., St. Louis, Mo. Regular meetings, third Tuesday of each month, except June, July and August, Hotel De Soto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION.—Frank Kartheiser, Chief Clerk, Mechanical Dept., C. B. & Q., Chicago, Ill. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—G. K. Oliver, 2514 W. 55th St., Chicago, Ill. Regular meetings, second Monday of each month, except June, July and August, La Salle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—Mrs. M. D. Reed, 1817 Hotel Statler, McKinley Square, Buffalo, N. Y. Regular meetings, second Thursday of each month, except June, July and August, Hotel Statler, Buffalo, N. Y.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—J. T. Bougher, 424 W. 33rd St. (11th floor), New York, N. Y. Annual meeting, September 26, 1940.

INTERNATIONAL RAILWAY GENERAL FOREMEN'S ASSOCIATION (See Locomotive Maintenance Officers' Association).

INTERNATIONAL RAILWAY MASTER BLACKSMITHS' ASSOCIATION.—W. J. Mayer, Michigan Central R. R., Detroit, Mich.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—J. E. Goodwin, Gen. Foreman, Loco. Dept., Missouri Pacific R. R., No. Little Rock, (P. O. Little Rock), Ark. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

MASTER BOILER MAKERS' ASSOCIATION.—A. F. Stiglmeier, 29 Parkwood St., Albany, N. Y. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Clyde S. Bailey, New Post Office Bldg., Washington, D. C. Annual meeting, December 10-12, 1940, Miami, Fla.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—C. H. White, Room 1826, 208 S. La Salle St., Chicago, Ill.

NEW ENGLAND RAILROAD CLUB.—W. E. Cade, Jr., 683 Atlantic Ave., Boston, Mass. Regular meetings, second Tuesday of each month, except June, July, August and September, Hotel Touraine, Boston, Mass.

NEW YORK RAILROAD CLUB.—D. W. Pye, 30 Church St., New York, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, 29 W. 39th St., New York, N. Y.

PACIFIC RAILWAY CLUB.—William S. Wollner, P. O. Box 3275, San Francisco, Cal. Regular meetings, second Thursday of each alternate month, at Palace Hotel, San Francisco, and second Friday of each alternate month at Hotel Hayward, Los Angeles.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, First National Bank Bldg., Chicago, Ill.

RAILWAY CLUB OF PITTSBURGH.—J. D. Conway, 1647 Oliver Bldg., Pittsburgh, Pa. Regular meetings, fourth Thursday of each month, except June, July and August, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price Allen-Bradley Company, 600 W. Jackson Blvd., Chicago, Ill.

RAILWAY FUEL AND TRAVELING ENGINEERS' ASSOCIATION.—T. Duff Smith, 1255 Old Colony Bldg., Chicago, Ill. Annual meeting, October 22-25, 1940, Hotel Sherman, Chicago, Ill.

RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION.—J. D. Conway, 1647 Oliver Bldg., Pittsburgh, Pa.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with Telegraph and Telephone section of A. A. R.

RAILWAY TIE ASSOCIATION.—Roy M. Edmonds, 903 Syndicate Trust Bldg., St. Louis, Mo.

ROADMASTERS' AND MAINTENANCE OF WAY ASSOCIATION.—G. L. Sitton, (President), Southern Ry., Charlotte, N. C. Annual meeting, September 10-12, 1940, Hotel Stevens, Chicago, Ill.

SIGNAL APPLIANCE ASSOCIATION.—G. A. Nelson, Waterbury Battery Company, 30 Church St., New York, N. Y. Meets with A. A. R., Signal Section.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB.—A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—D. W. Brantley, C. of Ga. Ry., Savannah, Ga. Semi-annual meeting, July 25, 1940, Hotel Patten, Chattanooga, Tenn.

TORONTO RAILWAY CLUB.—D. M. George, P. O. Box 8, Terminal "A," Toronto, Ont. Regular meetings, fourth Monday of each month, except June, July and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q. and C. Company, 59 E. Van Buren St., Chicago, Ill. Exhibit in connection with Roadmasters' and Maintenance of Way Association Convention, September 9-12, 1940, Hotel Stevens, Chicago, Ill.

UNITED ASSOCIATIONS OF RAILROAD VETERANS.—Roy E. Collins, 112 Hatfield Place, Port Richmond, Staten Island, N. Y. Annual meeting, October 12-13, 1940, Hotel Buena Vista, Biloxi, Miss.

WESTERN RAILWAY CLUB.—W. L. Fox (Executive Secretary), Room 822, 310 South Michigan Ave., Chicago, Ill. Regular meetings, third Monday of each month, except June, July, August and September, Hotel Sherman, Chicago, Ill.

Supply Trade

George M. Verity Honored

While 20,000 of his employees and townsmen at Middletown, Ohio, looked on, George M. Verity, chairman of the American Rolling Mill Company, on July 4 was given the title of America's outstanding "Humanizer of Business" by B. C. Forbes, business columnist and publisher of Forbes Magazine. A twilight parade of 3500 marchers preceded the ceremony—composed of Legionnaires, national guardsmen, armored cavalry units, naturalized citizens, industrial workers, and other civic and fraternal organizations.

"Not one hour of work has ever been lost during The American Rolling Mill Company's 40 years' existence through labor strife," said Mr. Forbes in bestowing the award. "So fully have employees been taken into consultation and confidence all through the years, that when outside influences from time to time sought to intrude, the men overwhelmingly turned thumbs-down.

"From his earliest small-scale beginnings to and through years of spectacular growth and success, Mr. Verity has questioned no applicant for work as to his affiliations, religious, political or with organized groups. His humane policies enabled him to get along harmoniously with all honest-intentioned men. Long, long before the government took up 'social-security', this employer's work folks enjoyed it in generous measure. They enjoyed—and still enjoy—far greater benefits, privileges, consideration, than anything written into law even today."

The Committee of Award included: Dr. Carl W. Ackerman, Evans Clark, Dr. Kenneth Dameron, Benjamin A. Javits, General Hugh S. Johnson, Dr. Virgil Jordan, H. J. Kenner, Dr. Julius Klein, J. T. Madden, Dr. Oscar S. Pulman, Ogden Reid, Dr. Christian F. Reisner, Dr. Alexander G. Ruthven, Philip C. Staples, Dr. Rufus B. von Kleinsmid, E. R. Weidlein, Whiting Williams, and Dr. Stephen S. Wise.

W. D. Lindsay, director of traffic of the **United States Gypsum Company,** Chicago, retired on July 10, after 37 years of service with that company.

Gilbert W. Kahn, partner of Kuhn, Loeb & Company, New York, has been elected a director and member of the executive committee of the **Union Asbestos & Rubber Company,** Chicago.

Multi-Vent Research Laboratory

The Pyle-National Company has recently completed a Multi-Vent research laboratory within a railroad coach at the company's plant in Chicago. This coach laboratory was designed for the testing of various types of Multi-Vent panels, lighting fixtures, etc., which will be changed as further progress is made in the study of air distribution.

The laboratory equipment at present consists of Pitot tubes, micromanometers to measure air pressure, laboratory thermometers, velometers and Kata-Thermometers for the measurement of extremely low air velocities, variable speed blowers and heat controls.

A complete analysis of heating or cooling problems for any type of passenger car may be made, as well as a visual study of the resultant air flow and distribution by means of smoke injected into the air stream. This laboratory coach is open for demonstration and tests at any time.

Hinged Multi-Vent Panel Lowered for Cleaning or Access to Plenum Chamber—Note the Simple Standard Wiring with Movable Connection at the Hinge

OBITUARY

Harry T. Smith, traffic manager of the Worthington Pump & Machinery Corporation, with headquarters at Harrison, N. J., died at his home in Metuchen, N. J., on July 3. Mr. Smith was associated with Worthington for 54 years, having first been employed with the old Henry R. Worthington Hydraulic Works in Brooklyn, N. Y.

Equipment and Supplies

LOCOMOTIVES

THE READING COMPANY will close a contract within a week or 10 days for 10 Diesel-electric switching locomotives for use at Philadelphia, Pa.

THE CHICAGO, ROCK ISLAND & PACIFIC has ordered one 2,000-hp. Diesel-electric locomotive from the Electro-Motive Corporation, La Grange, Ill., for use in its new St. Louis, Mo.-Twin Cities service next fall.

FREIGHT CARS

THE UNION PACIFIC is inquiring for 1000 50-ton ballast cars.

THE ATLANTIC COAST LINE is inquiring for 1,665 cars as follows: 600 50-ton box cars; 100 50-ton automobile cars; 100 70-ton phosphate cars; 50 40-ton stock cars; 15 70-ton hopper cement cars; 300 55-ton hoppers; 300 50-ton ballast cars and 200 50- to 70-ton gondolas.

PASSENGER CARS

THE CHICAGO, ROCK ISLAND & PACIFIC has ordered the stainless steel streamlined equipment for its new St. Louis-Twin Cities Rocket from the Pullman Standard Car & Manufacturing Company, Chicago, for delivery in October. The equipment will consist of two baggage and express cars, a chair car, a standard Pullman and a dining-observation-lounge car.

IRON AND STEEL

THE WABASH has ordered 2,000 tons of rails, placing 1,500 tons with the Carnegie-Illinois Steel Corporation and the remainder with the Inland Steel Company.

THE NORFOLK & WESTERN has placed orders for 25,000 tons of 131-lb. rail—18,750 tons with the Carnegie-Illinois Steel Corporation and 6,250 tons with the Bethlehem Steel Company.

SIGNALING

THE CHICAGO & WESTERN INDIANA has placed orders with the Union Switch & Signal Co. covering the materials necessary for the installation of two modern Electro-Pneumatic Interlocking plants at 15th St. and 16th St., Chicago. A 31-lever

Continued on next left-hand page

YOU NEED . . . *The "Extra Capacity" of*

MODERN POWER

Photo courtesy Southern Pacific Company

Intensive demands are being made of all industry, and the railroads are once again the nerve center of this effort. They will rise to this occasion as they always have in the past.

Lima is prepared to supply the railroads with modern power that gives the "Extra Capacity" needed to haul heavier loads at the speeds the intensive effort requires.

LIMA LOCOMOTIVE WORKS, LIMA LOCOMOTIVE WORKS INCORPORATED **INCORPORATED, LIMA, OHIO**

machine will be used at each interlocking for the control of the various functions at these two plants, with traffic locking to be arranged for on two tracks between the 15th and 16th street layouts and, on one track between 15th street and Roosevelt road at the throat of the Dearborn street station. Electro-pneumatic A-5 switch movements using separately mounted cut-off valves along with searchlight type signals are being installed throughout. The field installation will be carried out by the Railroad Co.'s regular signal construction forces.

Financial

ATLANTIC COAST LINE.—*Abandonment.*—This company has asked the Interstate Commerce Commission for authority to abandon the following lines: From Conway, S. C., to Aynor, 14.8 miles, and from Latta, S. C., to Clio, 19.8 miles.

ATLANTIC COAST LINE-LOUISVILLE & NASHVILLE. — *Bonds of the Carolina, Clinchfield & Ohio.*—Division 4 of the Interstate Commerce Commission has authorized the Carolina, Clinchfield & Ohio to extend from June 1, 1938, to December 15, 1952, the maturity date of $3,000,000 of its first mortgage five per cent bonds, which became due June 1, 1938.

BOSTON TERMINAL.—*Salary of Trustee.*—Division 4 of the Interstate Commerce Commission has ordered that S. Lewis Barbour be paid at the rate of $10,000 per year for his services as trustee of this company in reorganization proceedings under section 77 of the Bankruptcy Act.

CHICAGO & NORTH WESTERN. — *Files brief opposing I. C. C. plan of reorganization.*—On July 8, Luther M. Walter, special counsel for the Chicago & North Western, filed the company's brief with Federal Judge John P. Barnes in opposition to the Interstate Commerce Commission's plan for reorganization of the road. Attorney Walter, who also has a motion before the court to remand the case to the I. C. C. for the purpose of determining the value of the property, has been granted leave by the court to submit additional evidence on July 22.

DELAWARE, LACKAWANNA & WESTERN-SYRACUSE, BINGHAMTON & NEW YORK.—*Renewal and Pledge of Note.*—The Syracuse, Binghamton & New York has been authorized by Division 4 of the Interstate Commerce Commission to renew to the Delaware, Lackawanna & Western its promissory note for $1,462,516 for a period of three years from January 4, 1941, and the D. L. & W. has been authorized to endorse the note and pledge and repledge it for six months and thereafter from time to time to and including June 30, 1943, as collateral security for the payment of the note for $950,000 which has been executed and delivered by it to the First National Bank of the City of New York for a loan of a like amount payable on June 30, 1940. This latter note will be again renewed for a period of six months from June 30, 1940, with interest at the rate of 3½ per cent.

HUNTINGDON & BROAD TOP MOUNTAIN RAILROAD & COAL COMPANY.—*Equipment Trust Certificates.*—This company has been authorized by Division 4 of the Interstate Commerce Commission to modify $77,000 of its six per cent equipment trust certificates, 18th series, by extending the maturity date from October 1, 1939, to October 1, 1944, and by reducing the interest rate from six per cent to three per cent per year.

MISSOURI PACIFIC.—*Requests I. C. C. make further study of reorganization plan.*—On July 9, Luther M. Walter of Chicago, representing a committee for the common stockholders at a hearing before Judge George H. Moore in St. Louis, Mo., filed a request that the court refer the proposed plan of reorganization back to the Interstate Commerce Commission for further consideration. Mr. Walter contended that the commission had failed to determine the true value of the railroad properties and to make any provision for holders of the common stock. Objections to the plan were entered also by 15 other groups of security owners and creditors.

MISSOURI PACIFIC.—*Postpone Hearings.*—After a one-day hearing of arguments and the introduction of evidence in connection with objections to the I. C. C. plan of reorganization before Judge George H. Moore in St. Louis, Mo., hearings were deferred until October 7 to permit the counsel for the various groups of Missouri Pacific and subsidiary companies bondholders to study the exhibits submitted by the counsel for the railroad in support of objections to the proposed plan.

MOBILE & OHIO.—*Foreclosure Sale for Merger with G. M. & N.*—August 1 has been set as the date for the foreclosure sale of the Mobile & Ohio. The properties will be bid in by the reorganization manager and, under the terms of the plan to merge the M. & O. and the G. M. & N. to form the Gulf, Mobile & Ohio, the securities of the new railroad will be distributed. Holders of M. & O. securities who do not deposit them with the reorganization committee will receive upset prices, which have been set by the court for these securities and which are "substantially" below the open market price for the bonds.

NORFOLK SOUTHERN.—*Equipment Trust Certificates and R. F. C. Financing.*—Division 4 of the Interstate Commerce Commission has approved a plan whereby this company would issue and sell to the Reconstruction Finance Corporation $136,000 of 2½ per cent equipment trust certificates maturing in semiannual installments of $7,000 from February 1, 1941, to August 1, 1948, inclusive, and of $6,000 from February 1, 1949, to August 1, 1950, inclusive.

PENNSYLVANIA.—*Equipment Trust Certificates.*—This company has asked the Interstate Commerce Commission for authority to assume liability for $7,995,000 of 2¼ per cent equipment trust certificates, maturing in annual installments of $533,000 on July 1, of each year from July 1, 1941, to and including July 1, 1955. The proceeds will represent 80 per cent of the total purchase price of equipment costing $9,993,750, and consisting of 2,545 freight cars, 25 steam locomotive tenders, two steam passenger locomotives and tenders, and eight lightweight passenger cars. The petition states that the company will construct the freight cars and tenders in its own shops.

PEORIA & EASTERN.—*Adjustment plan confirmed.*—The plan of adjustment for the Peoria & Eastern (operated by the Big Four) was approved by a special statutory court of three federal judges in New York on July 9. The only modification of the plan, which has been approved by the Interstate Commerce Commission and 80 per cent of the road's bondholders, made by the court, was a provision for representation of minority income bondholders by one director of the board.

ST. LOUIS-SAN FRANCISCO. — *Board Chairman Petitions for Recompense for Services.*—On July 6, E. N. Brown of New York petitioned the federal district court at St. Louis, asking $50,000 for his services as chairman of the board of directors from November 1, 1932 to November 1, 1939. Judge George H. Moore ordered the petition transmitted to the Interstate Commerce Commission.

WABASH.—*Revised Reorganization Plan.*—A revised plan of reorganization for this company was submitted to the United States district court at St. Louis on July 3 by the receivers of the company, Norman B. Pitcairn and Frank C. Nicodemus, Jr. Under the plan, all classes of existing securities would participate, including the common stock. Fixed interest debt, which at present amounts to $187,149,144, including accrued interest, would be scaled down to $76,389,524 of fixed interest debt and $38,207,975 of contingent debt. Preferred stock would be reduced from $71,125,592 to $45,526,896 and common stock cut from $66,995,175 to $473,440 with a par value of one dollar per share. Under the plan, issues totaling $11,385,000 would be left undisturbed, including the Wabash-St. Charles Bridge 1st 4s, the Wabash-Hannibal Bridge 3½ per cent notes and the equipment trust 2½ per cent certificates. Cash payments would be made of $1,688,079, representing from 4 to 100 per cent of the interest due on various issues. Old preferred B stock would be converted into new preferred. Old perferred A stock would receive for each share one-eight share of new common. The common stock would be exchanged for one-eight share of new common and $7 in 50-year income bonds, Series B, upon the payment of $7 in cash for each outstanding common share. Stockholders not paying the assessment would be excluded from participation. The new securities to be issued would include $6,394,583 in 25-year first 3s; $44,118,530 in 30-year first 3⅛s; $19,722,445 in 40-year income 4s, series A; $18,485,530 in 50-year income 4s, series B; $4,491,411 in serial collateral 2 per cent notes; $45,526,896 in new $100 par preferred stock and

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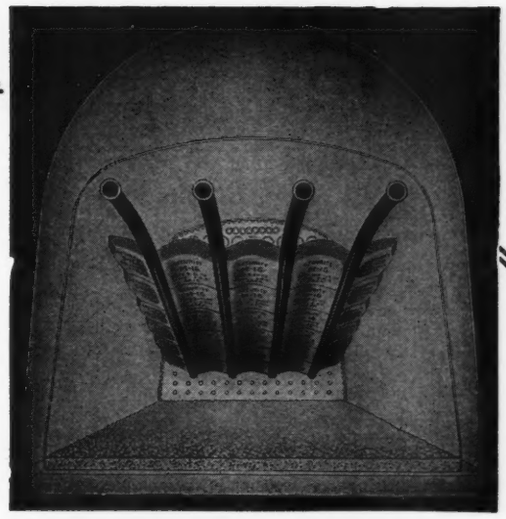

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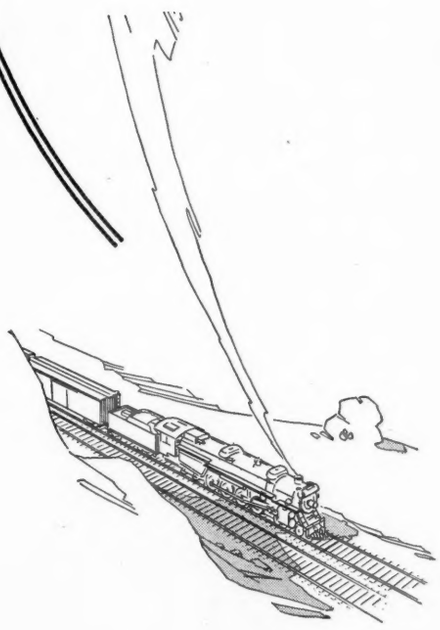

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WATERLOO, CEDAR FALLS & NORTHERN. —*Receiver appointed.*—C. M. Cheney, president and general manager, has been appointed receiver of the company, with headquarters as before at Waterloo, Iowa.

Average Prices of Stocks and Bonds

	July 9	Last week	Last year
Average price of 20 representative railway stocks..	27.73	27.48	28.11
Average price of 20 representative railway bonds..	56.57	55.30	58.23

Dividends Declared

Pittsburgh, Cincinnati, Chicago & St. Louis.—$2.50, semi-annually, payable July 20 to holders of record July 10.

Virginian.—62½¢, quarterly, payable September 25 to holders of record September 14; Preferred, 37½¢, quarterly, payable November 1 to holders of record October 19.

Construction

CHESAPEAKE & OHIO.—This company is contemplating the repair of its coach shop building at Richmond, Va., replacing wood floors with concrete, providing additional pit tracks and overhead cranes, and replacing swinging doors with overhead doors; and erecting a new paint spraying building with canopy exhaust system, lean-to and toolroom at Huntington, W. Va., all of the above work to cost approximately $99,000. Plans are being prepared to ask for bids on the overhead doors at Richmond and all of the work at Huntington, the balance of this work to be done by company forces. Bids were asked July 10 for grading work for additional mine tracks at Holden and Whitman, W. Va., this work to cost approximately $58,000.

The road is also contemplating carrying out with its own forces, the following projects: Extension of passing tracks from Lee, Va., to Norwood (estimated cost, $28,600); improvement of floodlight towers at 16 yards throughout the system ($85,000); extension of passing tracks at Major, Va., ($42,000); and at Stonewall, W. Va., ($28,000); construction of additional industrial lead at South Charleston, W. Va. ($47,000); revision of line at Ray, Ky. ($37,000); installation of blast plates and repairing overhead bracing of three bridges at Columbus, Ohio ($25,750); and construction of four stub-end tracks at west end of eastbound yard at Walbridge, Ohio ($33,000).

The following contracts have been awarded by this company: To the Virginian Engineering Company, Newport News, Va., for the erection of a modern brick passenger station at Newport News, at a probable cost of $45,000; to Forbes Construction Company, Huntington, W. Va., for grading for additional industrial tracks at Leach, Ky., to cost approximately $31,000; to Langhorne & Langhorne Company, Huntington, W. Va., for line change and roadbed widening at Offutt, Ky., to cost approximately $66,000. A contract for a $65,600 coaling station, awarded to the Ogle Construction Company, was reported in the *Railway Age* of June 22.

Railway Officers

EXECUTIVES

C. M. Cheney, president and general manager of the Waterloo, Cedar Falls & Northern, has been appointed receiver, with headquarters as before at Waterloo, Iowa. **C. D. Cass,** vice-president, and **A. C. Johnson,** assistant to president, have been appointed assistants to the receiver.

FINANCIAL, LEGAL AND ACCOUNTING

J. B. Knowles, secretary, treasurer and auditor of the Waterloo, Cedar Falls & Northern, has been appointed auditor and treasurer for the receiver, with headquarters as before at Waterloo, Iowa, a change in title. **B. F. Swisher,** general counsel, has been appointed general counsel for the receiver, and **George E. Hise,** general attorney, has been appointed general attorney for the receiver.

William Bennett Kraft, assistant comptroller of the Pennsylvania, has retired after 52 years of service. Mr. Kraft was born in Philadelphia, and entered the service of the Pennsylvania at the age of 17, as junior clerk in the office of the auditor of passenger receipts. On January 8, 1892, he was transferred to the office of the comptroller, and was successively advanced to special agent, chief clerk to the assistant to the comptroller, and chief clerk to the assistant comptroller. He was promoted to assistant auditor of miscellaneous receipts and accounts on May 1, 1909, and appointed auditor of that office on October 1, 1910, continuing to serve in that position until January 1, 1917, when he assumed the duties of auditor of freight receipts. He became auditor of revenues on March 1, 1920, and continued in that capacity until his promotion to assistant comptroller on December 1, 1927.

OPERATING

John Bryce, superintendent of the New York zone of the Pullman Company, has been appointed a member of the staff of the vice-president, operations, at Chicago. **C. M. Fitzgerald,** district superintendent at Kansas City, Mo., has been transferred to Los Angeles, Cal., replacing **J. P. Leach,** who has been appointed superintendent of the New York zone, succeeding Mr. Bryce, and **G. Williams,** assistant district superintendent at Chicago, has been appointed district superintendent at Salt Lake City, Utah, succeeding **J. M. Chamberlain,** who has been appointed second assistant superintendent at Los Angeles.

J. C. Stewart, whose appointment as superintendent of stations and transfers of the Pennsylvania, with headquarters at Philadelphia, Pa., was announced in the *Railway Age* of June 22, was born on April 4, 1893, at New Cumberland, W. Va. Mr. Stewart entered railroad service on May 4, 1910, as clerk with the Pennsylvania, at New Cumberland, W. Va. On April 2, 1920, he was appointed extra agent of the Panhandle division, being transferred to the Eastern division on April 1, 1921. On

J. C. Stewart

June 16, 1926, he became agent at Salem, Ohio, and on September 15, 1927, he went to Indianapolis, Ind., as supervising agent, being transferred to Altoona, Pa., on June 24, 1929, and to Harrisburg, Pa., on May 16, 1932. He was appointed freight agent at Philadelphia on May 1, 1934, and was transferred to Pittsburgh on September 16, 1935, serving in that position until his recent appointment.

Lawrence Suggs Jeffords, whose appointment as general superintendent of the Charleston & Western Carolina, with headquarters at Augusta, Ga., was announced in the *Railway Age* of June 29, was born on July 2, 1892, at Florence, S. C. He attended Clemson College and entered railroad service in the engineering department of the Atlantic Coast Line in March, 1910; soon after becoming rodman and instrumentman to resident engineer. Mr. Jeffords held other positions on the Atlantic Coast Line, including roadmaster,

Lawrence S. Jeffords

superintendent-steam shovel, and assistant engineer, maintenance of way. On January 1, 1921, he went with the Charleston & Western Carolina as engineer, maintenance of way, becoming superintendent on January 1, 1925, the position he held at the time of his recent appointment. During

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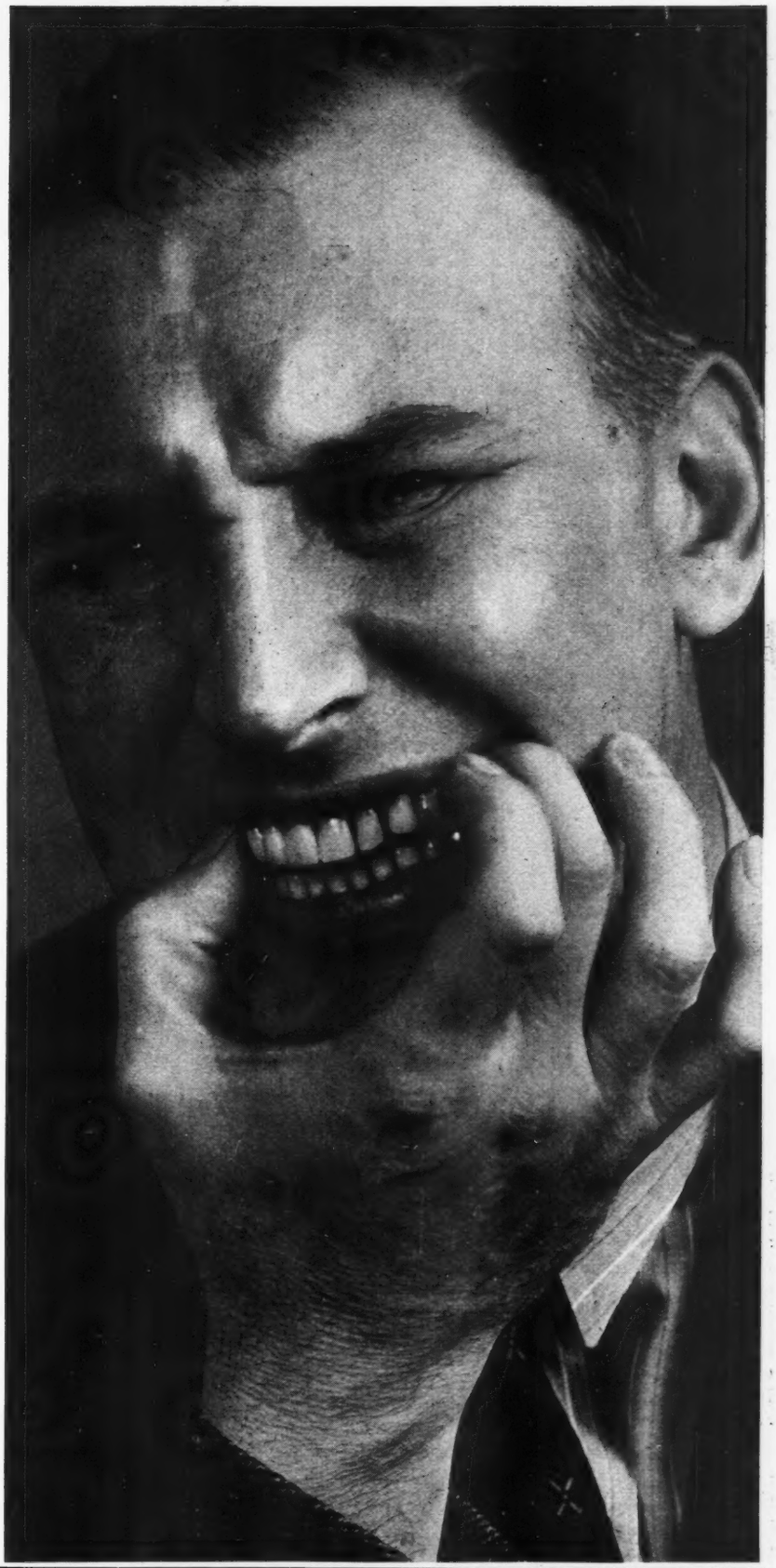

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the first World War, Mr. Jeffords was assigned from an officers' training camp to Savannah, Ga., for special duty with the railroads. He is a member of the American Railway Engineering Association.

Harry A. Sides, whose promotion to superintendent of stations and transfers, New York Zone of the Pennsylvania was announced in the *Railway Age* of June 22, was born at Manns Choice, Pa., on May 25, 1900. Mr. Sides entered the service of the Pennsylvania as an extra agent on the Juniata Division shortly after graduation from high school in 1917 and continued in this capacity after the Juniata Division was merged with the Middle division in 1921. In November, 1927, Mr. Sides was appointed chief clerk to the supervising agent at Altoona, Pa., and in February, 1930, he was appointed agent at Bedford, Pa., where he remained until June 1, 1934, when he was transferred to Huntingdon, Pa., as agent. In June, 1935, Mr. Sides was appointed supervising agent of the Wilkes Barre division, with headquarters at Sunbury, Pa., and held this position until March, 1937, when he was promoted to

Harry A. Sides

supervising agent, Philadelphia division, with headquarters at Harrisburg, Pa. On February 1, 1939, he was appointed freight agent at the President Street station, Baltimore, Md., which position he held until his appointment as superintendent of stations and transfers, New York Zone. Mr. Sides is a member of the Baltimore Traffic Club and the Baltimore Association of Commerce. He is also a member of the Freight Agents Association Section of the A. A. R.

James L. Cranwell, whose appointment as superintendent of the Monongahela division of the Pennsylvania, with headquarters at Pittsburgh, Pa., was announced in the *Railway Age* of June 22, was born on October 31, 1905, at Shreveport, La. He was graduated as a civil engineer from the University of South Carolina in 1926 and entered railroad service on July 13, 1926, as rodman on the Pennsylvania, at Cape Charles, Va., being transferred to Baltimore, Md., on December 19, 1926. Mr. Cranwell was appointed assistant on engineer corps at Washington, D. C., on April 1, 1927, becoming assistant supervisor at Hollidaysburg, Pa., on May 12, 1927, and later serving successively at Jamesburg, N. J., and Jersey City, N. J. He was appointed supervisor at Borden-

James L. Cranwell

town, N. J., on January 1, 1930, and on December 1, 1930, he returned to Jersey City as assistant supervisor. On October 16, 1931, he became assistant on engineer corps at Jersey City, and assistant supervisor at New York on November 16, 1931, being transferred to Downingtown, Pa., on June 3, 1932. On January 1, 1933, he went to Williamsport, Pa., as supervisor, being transferred to East Liberty-Johnstown, Pa., on October 1, 1933. Mr. Cranwell was appointed assistant division engineer at Philadelphia, Pa., on February 1, 1936, and was transferred to Fort Wayne, Ind., on July 1, 1937. On February 1, 1938, he became division engineer, St. Louis division, with headquarters at Terre Haute, Ind., being transferred to the Columbus division on January 16, 1939. On October 1, 1939, he was transferred to the Eastern division, at Pittsburgh, Pa., which position he held at the time of his recent appointment.

TRAFFIC

R. H. Deitiker, division freight agent on the Atchison, Topeka & Santa Fe at Fort Worth, Tex., has been promoted to assistant general freight agent at Denver, Colo., succeeding **F. W. Myers,** who has resigned to accept the presidency of the Denver Market and Produce Terminal in that city. **Joseph A. Dana,** traveling freight agent at Denver, Colo., has been promoted to division freight agent at Temple, Tex., replacing **Cecil H. Hull,** who has been transferred to Fort Worth, Tex., relieving Mr. Deitiker.

Horace Booth, general traffic manager for the Missouri Pacific Lines, with headquarters at Houston, Tex., retired on July 1. Mr. Booth entered railway service in 1874 as a clerk on the Texas & Pacific at Longview Junction, Tex., later becoming an agent at Forney, Tex. In 1880, he went with the International & Great Northern (now the International-Great Northern, part of the Missouri Pacific system), as a clerk at Longview, Tex., and later served as agent at Henderson, Tex., Tyler, Laredo and Houston, and as general agent at Houston. In 1900, he was promoted to assistant general freight agent and the following year to general freight agent. Mr. Booth was advanced to traffic manager, with headquarters at Houston in 1914, and in 1925 he was promoted to general traffic manager, with the same headquarters, the position he held until his retirement.

S. S. Butler, assistant chief traffic officer of the St. Louis-San Francisco, with headquarters at St. Louis, Mo., has retired. Mr. Butler was born at Murfreesboro, Tenn., on August 25, 1875, and entered railway service on November 1, 1890, as a clerk in the office of the auditor of the Texas & Pacific at Dallas, Tex. For the next 10 years he was successively clerk, relief agent and traveling auditor on the Texas & Pacific and in 1890 he became clerk to the commercial agent of the Frisco at Dallas. Later he served as soliciting freight agent, traveling freight agent and commercial agent at that point and on April 1, 1907, he was promoted to general agent at Ft. Smith, Ark. After three years as general eastern agent, with headquarters at New York, Mr. Butler was appointed traffic manager of the Gulf Coast Lines (Missouri Pacific), with headquarters at Houston, Tex., on January 1, 1912. He returned to the Frisco in 1915 as general southwestern freight agent at Houston. From 1916 to 1920, Mr. Butler was successively general agent for the Frisco at Pittsburgh, Pa., assistant general freight agent at St. Louis and general freight agent at the same point. He was promoted to freight traffic manager in 1920 and to the position of general freight traffic manager on March 1, 1928. On October 15, 1928, he was advanced to general traffic manager, and in November, 1934, he was appointed assistant chief traffic officer, the position he held until his retirement.

Thomas B. Duggan, whose promotion to general freight agent on the Missouri Pacific, with headquarters at St. Louis, Mo., was announced in the *Railway Age* of July 6, was born in England on July 25, 1883, and entered railway service on November 23, 1898, as a clerk in the office of the auditor of passenger receipts

Thomas B. Duggan

at St. Louis, later serving as a clerk in the freight claim department and in the freight traffic department. In April, 1922,

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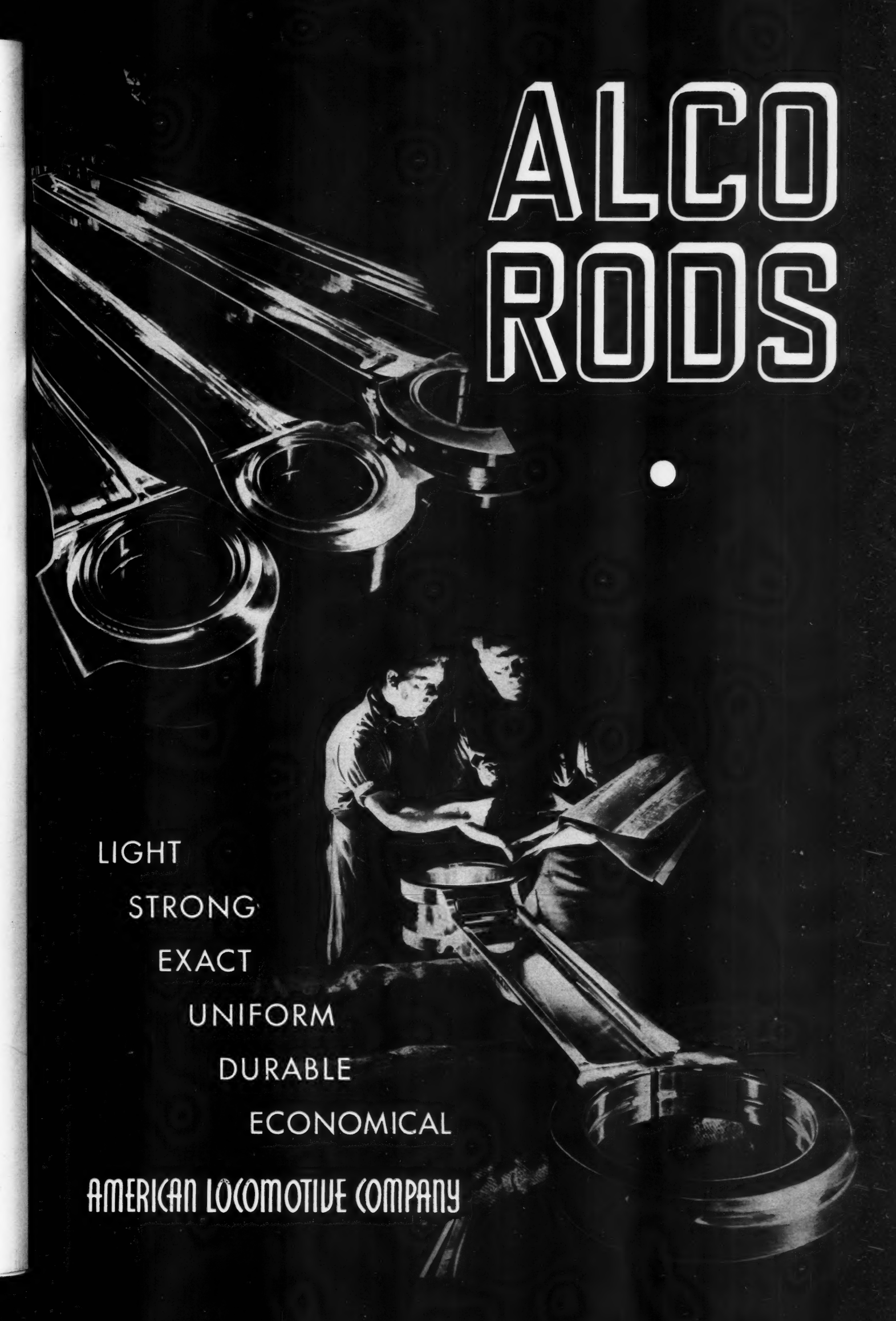
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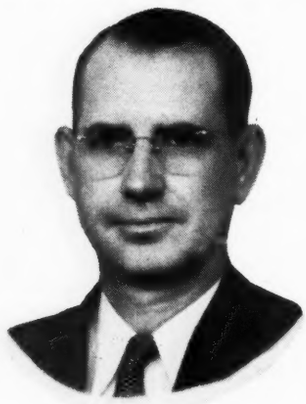
he was promoted to chief clerk to the assistant freight traffic manager, and in December, 1923, he was appointed chief clerk to the freight traffic manager. Mr. Duggan was advanced to assistant general freight agent, with headquarters at St. Louis, in April, 1927, the position he held until his recent promotion.

ENGINEERING AND SIGNALING

William H. Rife, whose retirement on June 30 as signal engineer of the Western lines of the Atchison, Topeka & Santa Fe, and of the Panhandle & Santa Fe, with headquarters at Amarillo, Tex., was announced in the *Railway Age* of June 29, was born near Liberty, Ill., on June 17, 1869, and entered railway service on January 9, 1899, as a laborer on the Santa Fe at Peabody, Kan. On July 8, 1900, he was promoted to towerman at Streator, Ill., and on January 7, 1902, he was appointed maintainer at that point. On September 1, 1905, he was transferred to Raton, N. M., and three months later he was appointed foreman at Pueblo, Colo. He was later transferred to Las Vegas, N. M., and to the Missouri division, and on June 15, 1914, he was promoted to supervisor, with headquarters at La Junta, Colo. Mr. Rife was promoted to signal engineer of the Western lines, with the same headquarters, on August 1, 1920, and on May 1, 1928, he was transferred to Amarillo, where he remained until his retirement.

J. A. Parkinson, whose promotion to signal engineer of the Western lines of the Atchison, Topeka & Santa Fe and of the Panhandle & Santa Fe, with headquarters at Amarillo, Tex., was announced in the *Railway Age* of June 29, was born at Topeka, Kan., on April 22, 1900, and



J. A. Parkinson

entered the employ of the Santa Fe as a laborer in the signal department in January, 1919. For three years he was employed on construction gangs, and in 1922 became a draftsman in the Eastern lines office. In the same year he resigned to attend Kansas university. During his college course, he worked intermittently in the office of the signal engineer, system, and after graduation, he was permanently assigned to work in this office. In May, 1926, he was promoted to chief draftsman in the office of the signal engineer of the system, and in September, 1936, he was promoted to assistant signal engineer, Eastern lines, with headquarters at Topeka, the position he held until his recent promotion.

PURCHASES AND STORES

A. S. Macdonald, whose appointment as general storekeeper, Eastern lines of the Canadian Pacific, with headquarters at Montreal, Que., was announced in the

A. S. Macdonald

Railway Age of June 29, entered railroad service in 1905 as clerk in the stores department of the Canadian Pacific at Revelstoke and Calgary. In 1907, Mr. Macdonald was appointed general store foreman at Winnipeg, Man., becoming district storekeeper at Vancouver in 1917. He also served at Winnipeg as district storekeeper. In January, 1932, he became assistant general storekeeper at Winnipeg, and in March of the same year was transferred to Montreal as assistant general storekeeper, Eastern lines, which position he retained until his recent appointment.

MECHANICAL

L. R. Schuster, chief car draftsman of the Southern Pacific at San Francisco, Cal., has been promoted to engineer of car construction, with the same headquarters, succeeding **E. B. Dailey,** who retired on June 30.

G. R. Galloway, superintendent of motive power of the Eastern lines of the Baltimore & Ohio, with headquarters at Baltimore, Md., has been transferred to the Western lines, with headquarters at Cincinnati, Ohio, succeeding **E. J. McSweeney,** who has been transferred to Baltimore, replacing Mr. Galloway.

OBITUARY

Thomas L. Faulkner, general agent for the Chicago & Eastern Illinois at Tulsa, Okla., died in that city on June 15, after a short illness.

William Parke Terry, corporate secretary of the Richmond, Fredericksburg & Potomac, Richmond Terminal Company, and the Richmond Land Corporation at Richmond, Va., died on July 1, at the age of 46. Mr. Terry was born on January 7, 1894, at Richmond. He entered railroad service on September 23, 1907, as messenger for the Richmond, Fredericksburg & Potomac. Subsequently he served as clerk, stenographer, and private secretary, becoming assistant corporate secretary on February 26, 1920. On April 21, 1932, he was appointed corporate secretary, the position he held at the time of his death.

James M. Barrett, who served for several years as terminal superintendent for the Baltimore & Ohio at New York, died on July 8, at the age of 83.

H. A. Bertram, division engineer on the Chesapeake & Ohio, with headquarters at Peru, Ind., died at the Memorial hospital, Richmond, Va., on July 6. Mr. Bertram had been in ill health for about a year.

Ray M. McWilliams, assistant secretary of the Gulf Coast Lines (Missouri Pacific), executive general agent for the Missouri Pacific and vice-president of the New Orleans & Lower Coast (Missouri Pacific), with headquarters at New Orleans, La., died in an auto accident near New Orleans on July 10.

Charles C. Warne, purchasing agent of the New York Central at New York, died on July 6, in Yonkers, N. Y., at the age of 58. Mr. Warne was born in England, on July 15, 1881, and received his education at the University of Pittsburgh, from which he was graduated in 1903. He obtained his first railroad experience in

Charles C. Warne

1903, as a rodman in the maintenance of way department, western division of the New York Central & Hudson River (now New York Central). From January, 1904, to March, 1905, he served as assistant supervisor of track and on the latter date he was appointed transitman and draftsman. In April, 1906, Mr. Warne was appointed assistant, division engineer, and from September, 1912, to January 1, 1914, he served as lumber agent. In January, 1914, he was promoted to assistant to purchasing agent becoming first assistant to purchasing agent in April, 1919. In March, 1931, he was appointed purchasing agent, the position he held at the time of his death.